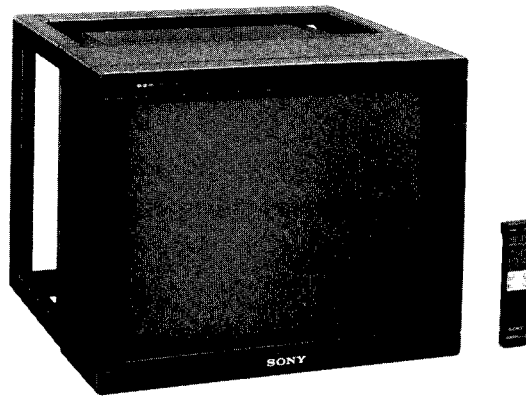


PVM-2130QM

RM-668

SERVICE MANUAL



AEP Model

Chassis No. SCC-A99A-A

Australian Model

Chassis No. SCC-B22A-A

West Germany Model

Chassis No. SCC-B19A-A

SPECIFICATIONS

Note: The service manuals for RM-668 have been issued separately.

Color system	PAL, SECAM, NTSC and NTSC _{4,43} systems, switched automatically	LINE A/B outputs (loop-through outputs)	VIDEO: BNC connector
Picture tube	Trinitron tube	AUDIO: Phono jack	
	Approx. 54.5 cm (21 inches)	Monitor outputs	VIDEO: BNC connector
	(50.6 cm picture measured diagonally)		Composite video, 1 Vp-p
	100-degree deflection, AG pitch 0.55 mm	AUDIO: Phono jack	Less than 1 kilohm
Resolution	Video input: 420 TV lines	Digital RGB inputs RGB: D-sub 9-pin connector	(See "Signal assignment".)
	RGB inputs: 640 × 200 dots	AUDIO: Phono jack	-5 dBs, more than 47 kilohms
	(2000 characters)	AV connector	21-pin connector
Color temperature	9300°K		(See "Signal assignment".)
Frequency response	10 MHz (-3 dB, RGB)	Speaker terminals	8 ohms
	5 MHz (-3 dB, composite video)	Control S input/output	Minijack, 5 Vp-p
Horizontal linearity	Less than ±7%	Power output	7 W + 7 W at 8 ohms
Vertical linearity	Less than ±8%	Power requirements	220 - 240 V AC, 50/60 Hz
Line pull range	Horizontal: +500 Hz	Power consumption	140 W
	Vertical: -8 Hz	Dimensions	Approx. 516 × 409 × 482 mm (w/h/d)
Overscan of the picture	Less than +7%		incl. projecting parts and controls
Convergence	Central area: within 1.0 mm	Weight	Approx. 30.6 kg
	Periphery: within 1.8 mm		
LINE A/B, VTR inputs		Supplied accessory	
VIDEO IN:	LINE A/B: BNC connector	Remote commander RM-668, with 2 R6 batteries.....	1
	Composite video, 1 Vp-p ±6 dB, sync negative, 75-ohm termination switchable		
	VTR: 8-pin connector	Optional accessories	
	Composite video, 1 Vp-p ±6 dB, sync negative, 75-ohm terminated	TV stand SU-538, SU540	
AUDIO IN:	LINE A/B: Phono jack	Speaker system SS-X6A, APM-X5A	
	-5 dBs, more than 47 kilohms		
	VTR: 8-pin connector, -5 dBs, more than 47 kilohms		

— Continued on page 2 —



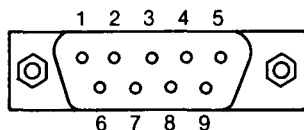
TRINITRON COLOR VIDEO MONITOR

SONY®

MON

SIGNAL ASSIGNMENT

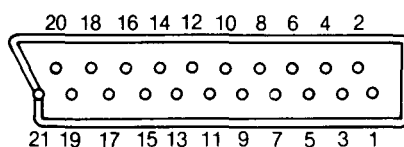
DIGITAL RGB connector (D-sub 9-pin)



Digital signal (TTL level)

Pin No.	Signal assignment
1	Ground
2	Ground
3	Red input
4	Green input
5	Blue input
6	Intensity input
7	No connection
8	H. sync input (positive/negative)
9	V. sync input (positive/negative)

AV connector (21-pin)



Pin No.	Signal	Signal level
1	Audio output B (right)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm *
2	Audio input B (right)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms *
3	Audio output A (left)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm *
4	Ground (audio)	
5	Ground (blue)	
6	Audio input A (left)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms *
7	Blue input	0.7 V \pm 3 dB, 75 ohms, positive
8	Function select (AV control)	High state (9.5 – 12 V): Peri mode Low state (0 – 2 V): TV mode Input impedance: More than 10 k ohms Input capacitance: Less than 2 nF

Pin No.	Signal	Signal level
9	Ground (green)	
10	Open	
11	Green input	(Same as Pin 7)
12	Open	
13	Ground (red)	
14	Ground (blanking)	
15	Red input	(Same as Pin 7)
16	Blanking input	High state (1 – 3 V) Low state (0 – 0.4 V) Input impedance: 75 ohms
17	Ground (video output)	
18	Ground (video input)	
19	Video output	1 V \pm 3 dB, 75 ohms, positive Sync: 0.3 V (\pm 3 dB)
20	Video input	1 V \pm 3 dB, 75 ohms, positive Sync: 0.3 V (\pm 3 dB)
21	Common ground (plug, shield)	

* at 20 Hz – 20 kHz

Design and specifications subject to change without notice.

TROUBLESHOOTING

If these symptoms occur when you begin operation, follow the suggestions below.


SYMPTOMS	CORRECTIONS
No controllable keys although the POWER switch is turned on.	• Press the CONTROL key.
No indication appears although the CONTROL key is pressed.	• Set the MANUAL CONTROL switch on the rear panel to ON.
Remote control is not possible.	• Set the REMOTE CONTROL switch on the rear panel to ON.

If the problem still cannot be solved, contract your authorized Sony dealer.

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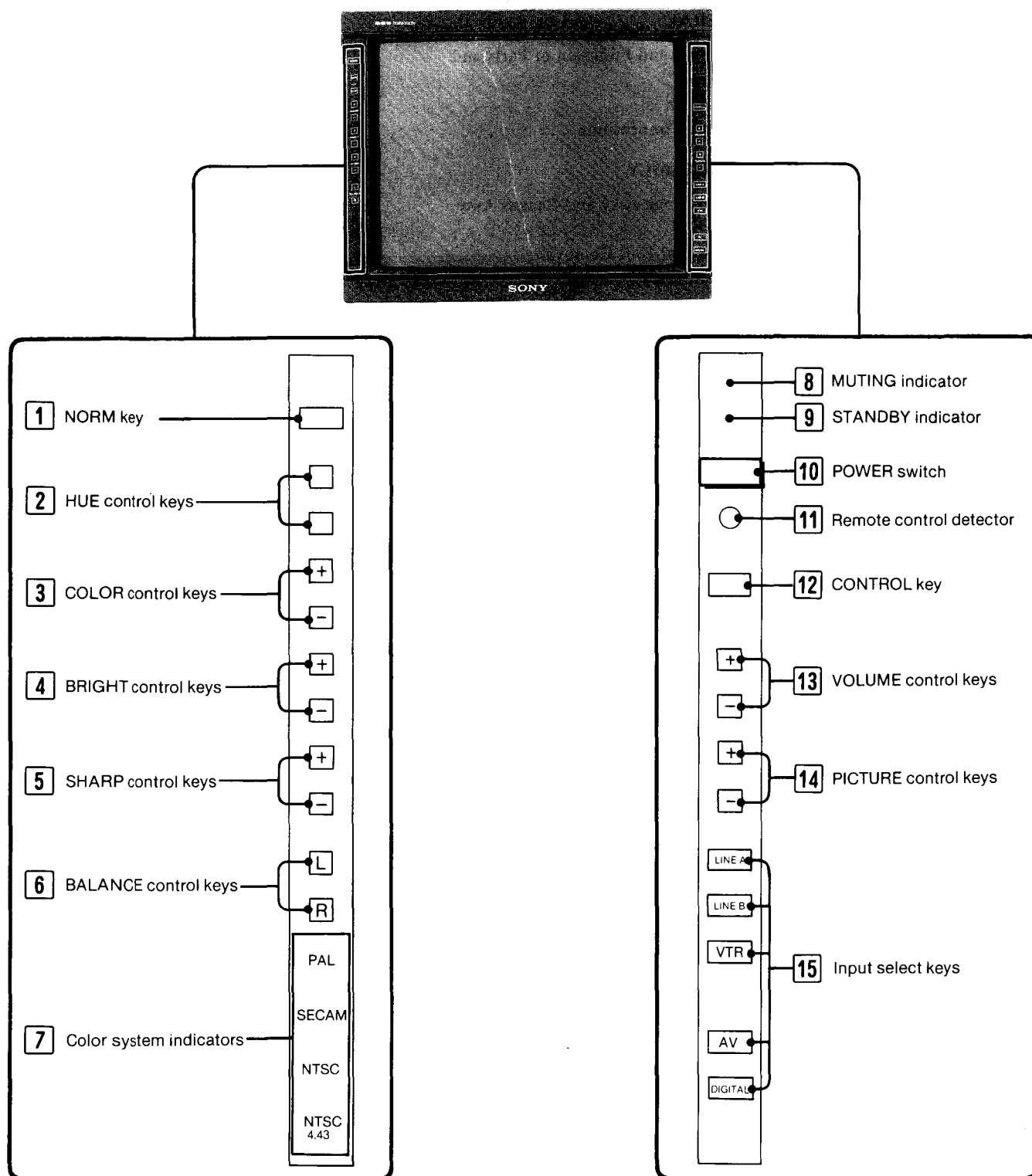
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SECTION 1 GENERAL

1-1. LOCATION AND FUNCTION OF PARTS AND CONTROL

FRONT PANEL



• Press CONTROL key after power is turned on to illuminate the control keys or indicators.

The following control keys are effective only when MANUAL CONTROL switch on the rear panel is set to ON.

- 1 NORM (normal) key**
Press this key to return to the standard setting.
• This key is effective only for the control keys on the left.
- 2 HUE control keys**
Press the GRN (green) key to make the skin tones greenish or the PUR (purple) key to make it purplish.
• These control keys are effective for the NTSC and NTSC_{4.43} color systems only.
- 3 COLOR control keys**
Press the + key to make the color intensity vivid or the – key to make it pale.
- 4 BRIGHT (brightness) control keys**
Press the + key to make the picture brighter or the – key to make it darker.
- 5 SHARP (sharpness) control keys**
Press the + key to obtain a sharp picture or the – key to obtain a soft picture.
- 6 BALANCE control keys**
Press the L key to increase the sound volume of the left speaker or the R key to increase the sound volume of the right speaker.
- 7 Color system indicators**
PAL, SECAM, NTSC, NTSC_{4.43}
The color system of the input signal is automatically selected and the corresponding indicator illuminates. When the input signal is monochrome, no color system indicator illuminates.
- 8 MUTING indicator**
Illuminates while the sound is muted.
• Muting is controlled only by the Remote Commander.
- 9 STANDBY indicator**
Illuminates when the power is turned off by the Remote Commander.
- 10 POWER switch**
Press this switch to turn the monitor on.
Press this switch again to turn it off.
• When the monitor is turned on, the settings of the monitor are the same as when it was last turned off.
• For a few seconds after turning on the monitor the color of picture may vary because the white balance is adjusted at this time. This is not a problem.

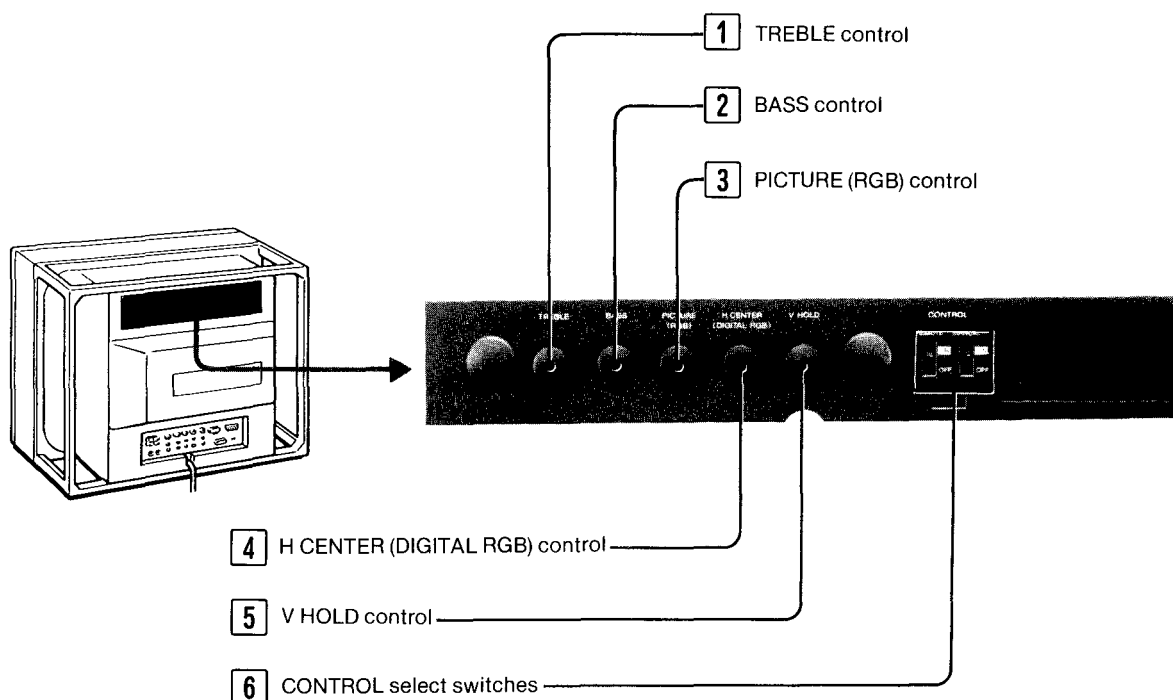
- 11 Remote control detector**
The beam from the Remote Commander is received here.
- 12 CONTROL key**
Press this key to illuminate the keys and indicators on the front panel.
Press this key again to extinguish them.
- 13 VOLUME control keys**
Press the + key to raise the volume or the – key to lower it.
- 14 PICTURE control keys**
Press the + key to make the contrast, color intensity and brightness stronger or the – key to make them weaker.
- 15 Input select keys**
LINE A, LINE B, VTR, AV, DIGITAL
Select the input source connected to the LINE A, LINE B, VTR, AV or DIGITAL RGB connector.
When a key is pressed:
• it blinks if the other indicators and keys on the front panel illuminate.
• it illuminates if they are extinguished.

Key illumination

For the keys **1** through **7**, **13** and **14**:

- While each key is pressed, it blinks, indicating that adjustment is going on.
- During adjustment, if the adjustment value reaches the limit, the blinking speed becomes slower.

REAR PANEL



1 TREBLE control

Turn clockwise for more treble (high tone), or counterclockwise for less.

2 BASS control

Turn clockwise for more bass (low tone), or counterclockwise for less.

3 PICTURE (RGB) control

Adjust the contrast of the RGB signals connected to the AV connector or the DIGITAL RGB connector.

4 H CENTER (DIGITAL RGB) (horizontal centering) control

When the picture of DIGITAL RGB input is decentered horizontally, correct it with this control.

5 V HOLD (vertical hold) control

When the picture rolls vertically, correct it with this control.

6 CONTROL select switches

Normally set to ON.

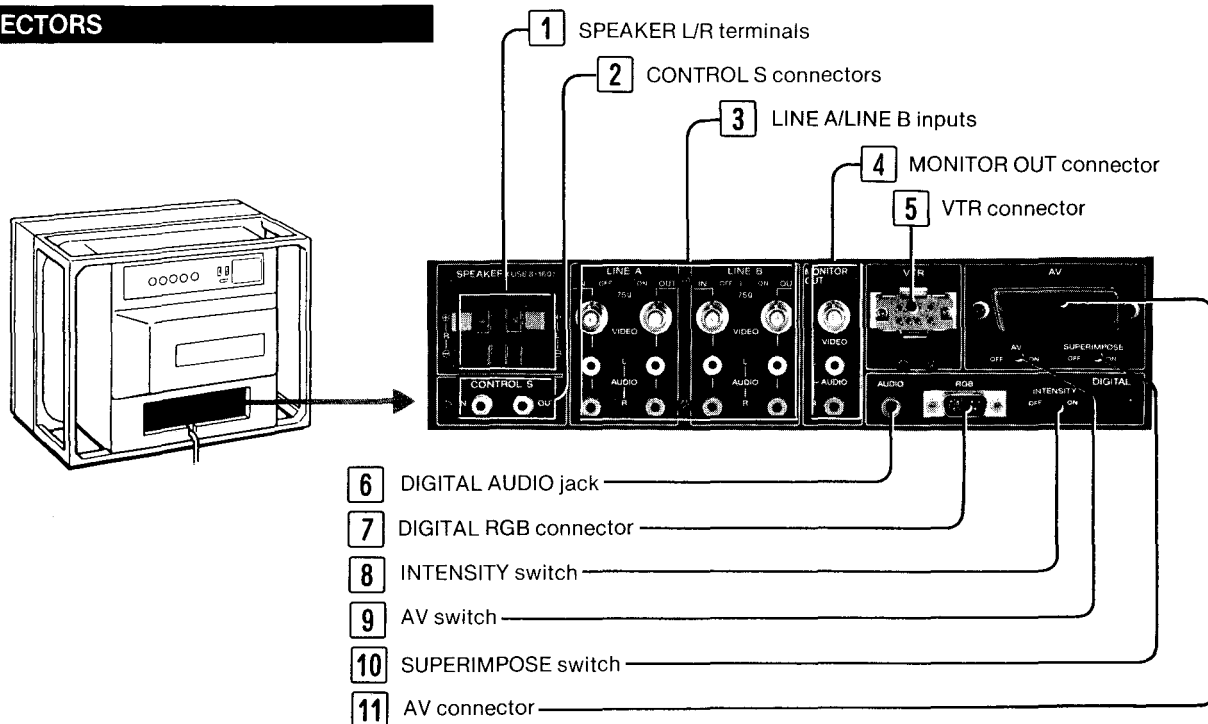
REMOTE CONTROL switch

Set this switch to ON to control the monitor with a Remote Commander.
If this switch is set to OFF, the remote control is not possible.

MANUAL CONTROL switch

Set this switch to ON to control the monitor manually. To make the manual control of the control keys or switches on the front panel impossible, extinguish the indicators by pressing the CONTROL key on the front panel and set this switch to OFF.
(However remote control is possible if the REMOTE CONTROL switch is set to ON.)

CONNECTORS



1 SPEAKER L/R terminals

Connect to speakers with 8 to 16 ohm impedance.

2 CONTROL S IN/OUT connectors

Connect to the CONTROL S connectors of a VTR or another monitor.
It is then possible to control the whole system with a single Remote Commander.

3 LINE A/LINE B inputs

VIDEO IN connector (BNC type)

AUDIO L/R IN jacks (phono jack)

Connect to the video and audio outputs of a VTR or a camera.

VIDEO OUT connector (BNC type)

AUDIO L/R OUT jacks (phono jack)

Loop-through outputs of the IN connector and jacks.
Connect to the video and audio inputs of another monitor.

75-ohm termination switch

When only the VIDEO IN connector is used (nothing is connected to the VIDEO OUT connector), set this switch to ON.

When both connectors are used together for a loop-through connection, set this switch to OFF.

4 MONITOR OUT connectors

VIDEO connector (BNC type)

AUDIO L/R jacks (phono jacks)

The video and audio signals supplied from the LINE A, LINE B, VTR or AV input selected by the front panel input select keys are output from these connectors.

Connect to the video and audio inputs of another monitor, VTR, etc.

5 VTR connector (8-pin)

Connect to a VTR with an 8-pin TV connector.

6 DIGITAL AUDIO jack (phono jack)

Connect to the audio output of an audio source to listen to the sound from the connected audio source while viewing the picture from the DIGITAL RGB connector.

7 DIGITAL RGB connector (9-pin, D-sub)

Connect to the digital RGB output of a microcomputer.

8 INTENSITY switch

Normally set to OFF. When a microcomputer provided with intensity output is connected, set to ON for 16-color display.

9 AV switch

Set to ON so that the monitor is automatically switched to the AV input when a signal is input from the AV connector, taking priority over the LINE A, LINE B or VTR input previously selected by the input select keys on the front panel. Set to OFF to select the AV input manually by pressing the AV input select key.

10 SUPERIMPOSE switch

Normally set to ON.

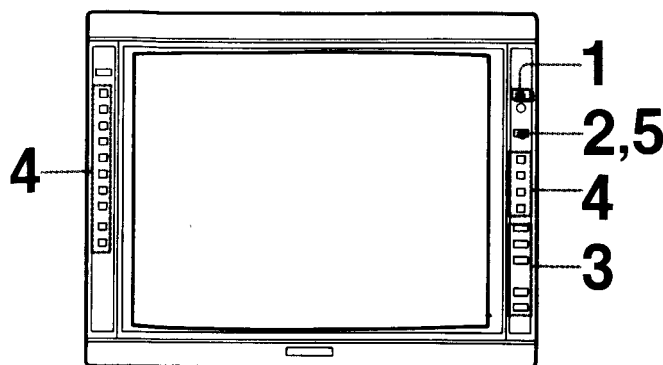
Set to OFF to display the analog RGB signal from the microcomputer connected to the AV connector.

11 AV connector (21-pin)

Connect to the 21-pin multiconnector of an 8 mm video cassette recorder or the analog RGB multioutput connector of a microcomputer.

1-2. OPERATION

DISPLAYING THE PICTURE



- 1** Depress the POWER switch.
One of the input select keys illuminates.
- 2** Press the CONTROL key.
The selected input select key blinks and all control keys on the front illuminate.
(If the control keys do not appear, set the MANUAL CONTROL switch on the rear to ON.)
- 3** Press the desired input select key.
The pressed key blinks and the picture from the selected input is displayed on the screen and the sound is heard through the speakers.
(For selecting the AV or DIGITAL input, see "Notes on input selection".)
- 4** Adjust the picture and sound.
- 5** Press the CONTROL key to extinguish the controls keys so that only the selected input select key illuminates.

SUPERIMPOSING

To superimpose the data from the microcomputer connected to the AV connector over the picture, proceed as follows.
(The data should be processed for superimposition on the microcomputer.)

- 1** Set the SUPERIMPOSE switch to ON.
- 2** Press the LINE A, LINE B or VTR input select key to display the picture on which the data is to be superimposed on the monitor screen.
- 3** Press the AV input select key.
The data is superimposed over the picture.
- 4** Adjust the contrast of the superimposed data with the PICTURE (RGB) control.

NOTES ON INPUT SELECTION

AV input and SUPERIMPOSE switch

Set the SUPERIMPOSE switch on the rear as follows, according to the signal supplied to the AV connector.

SUPERIMPOSE switch	Signal to be displayed
ON	<ul style="list-style-type: none"> To display the composite video signal from an 8 mm video cassette recorder, etc. To perform superimposition. (See "SUPERIMPOSING".)
OFF	<ul style="list-style-type: none"> To display the analog RGB signal from a microcomputer, etc. In this case, the sync signal should be supplied to pin 20 of the AV connector.

- When the AV input select key is pressed with the SUPERIMPOSE switch ON, the previously selected LINE A, LINE B or VTR input select key blinks together with the AV key.
- When it is pressed with the SUPERIMPOSE switch OFF, only the AV key blinks.

AV input and AV switch

When the AV switch on the rear is set to ON, the monitor is automatically switched from the LINE A, LINE B or VTR input to the AV input if a signal is input to the AV connector.
Set the AV switch to OFF to select the AV input manually by pressing the AV input select key.

DIGITAL input

- To display the digital RGB signal from a microcomputer provided with intensity output in 16 colors, set the INTENSITY switch on the rear to ON.
- If necessary, center the picture from the DIGITAL RGB connector with the H CENTER control on the rear panel.

Note

The COLOR, HUE and SHARP control keys do not function when the DIGITAL input is selected or the AV input is selected with the SUPERIMPOSE switch OFF.

CONNECTION DIAGRAM

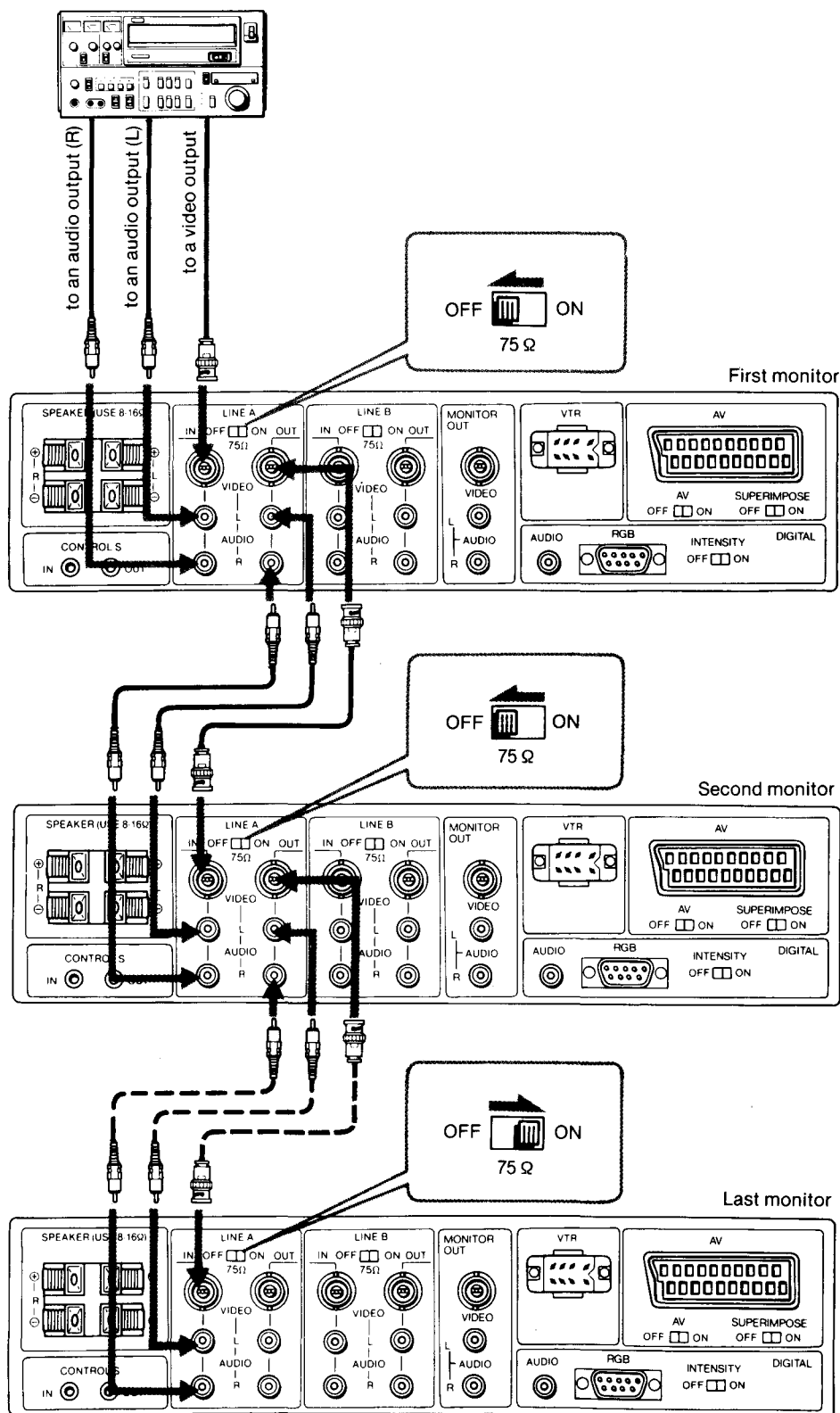


- When a microcomputer has an analog RGB output connector, connect it to the AV connector.

- 9 —

CONNECTING SEVERAL MONITORS

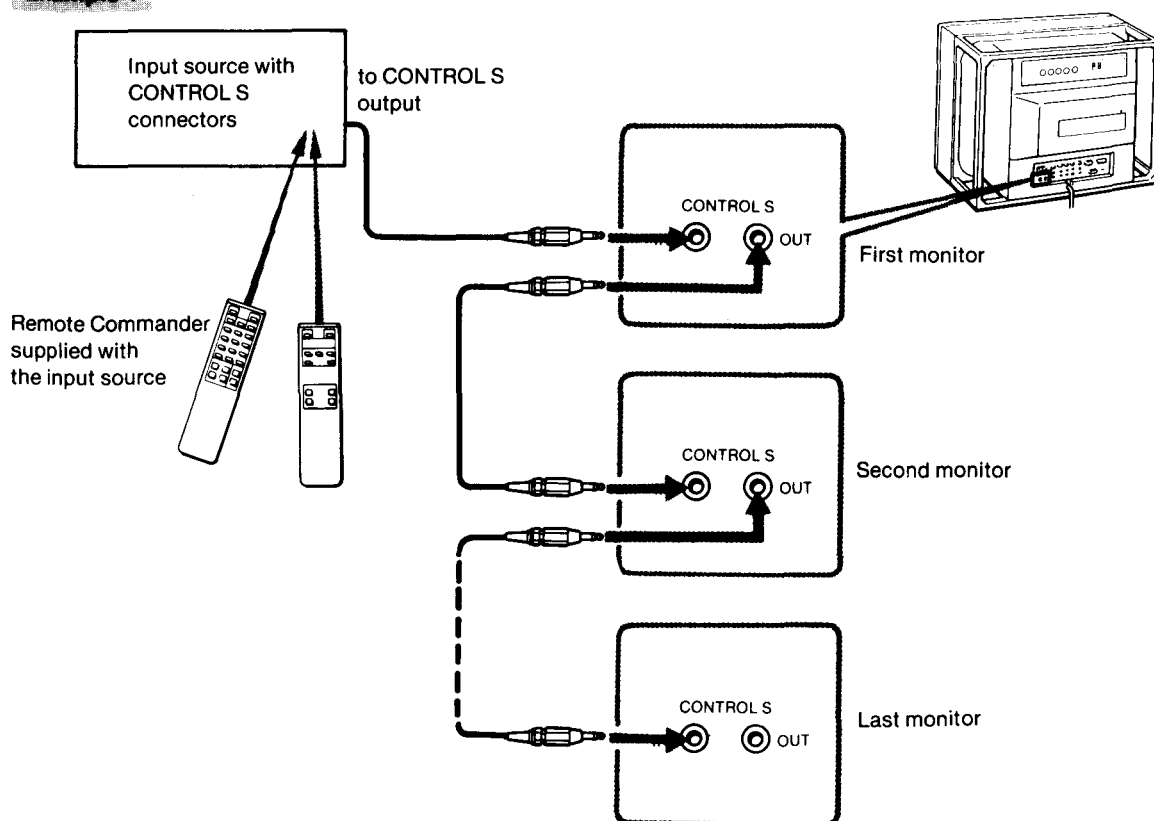
A loop-through connection is convenient for monitoring the same signal on their monitors. Up to 10 monitors can be connected. It is recommended to use a signal distributor when several monitors are connected.



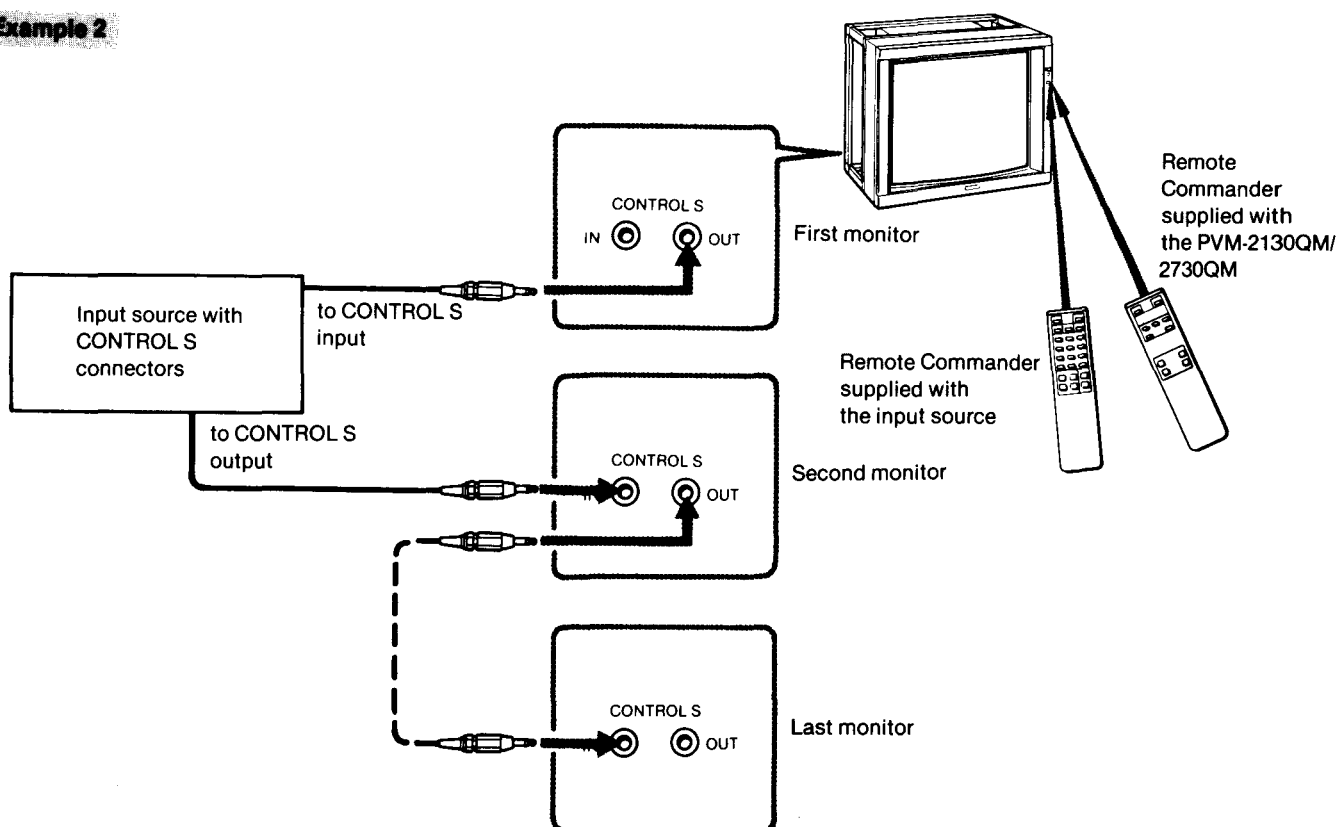
CONTROL S CONNECTION

The following connections allow remote control of several monitors and a VTR through a single monitor.

Example 1



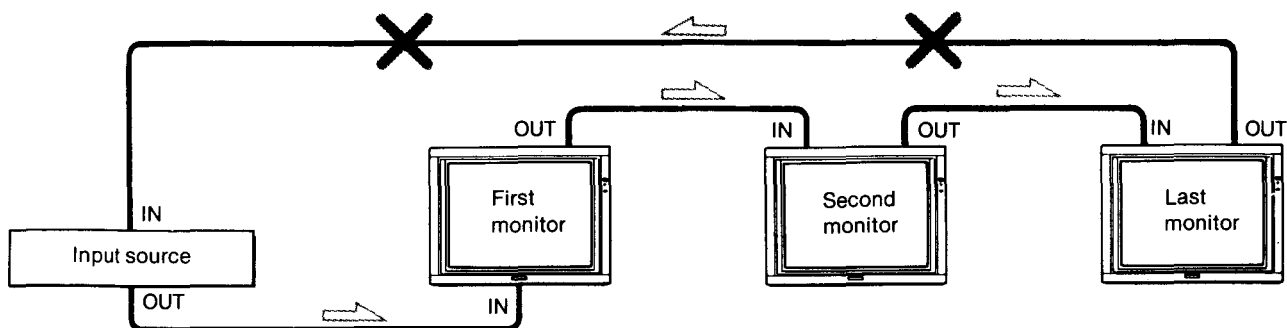
Example 2



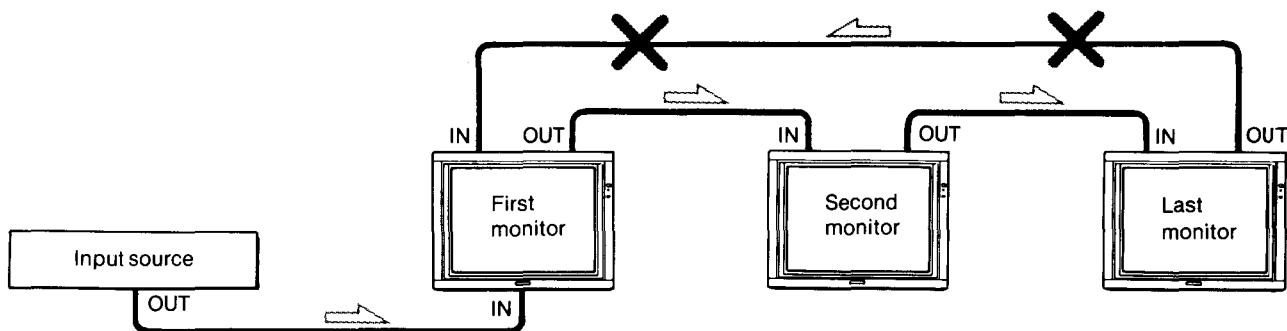
Note

Do not use the following loop connections.

Example 1



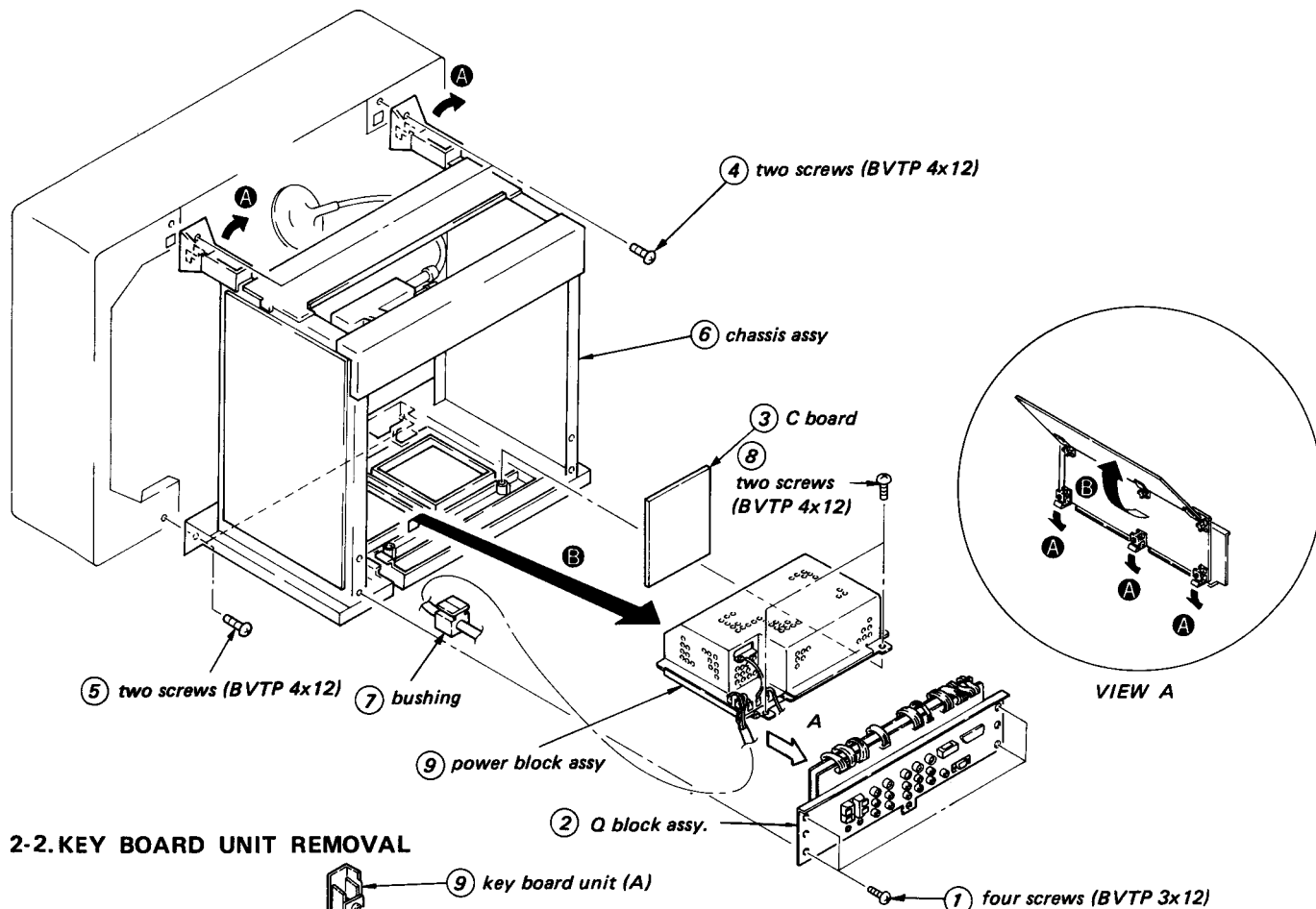
Example 2



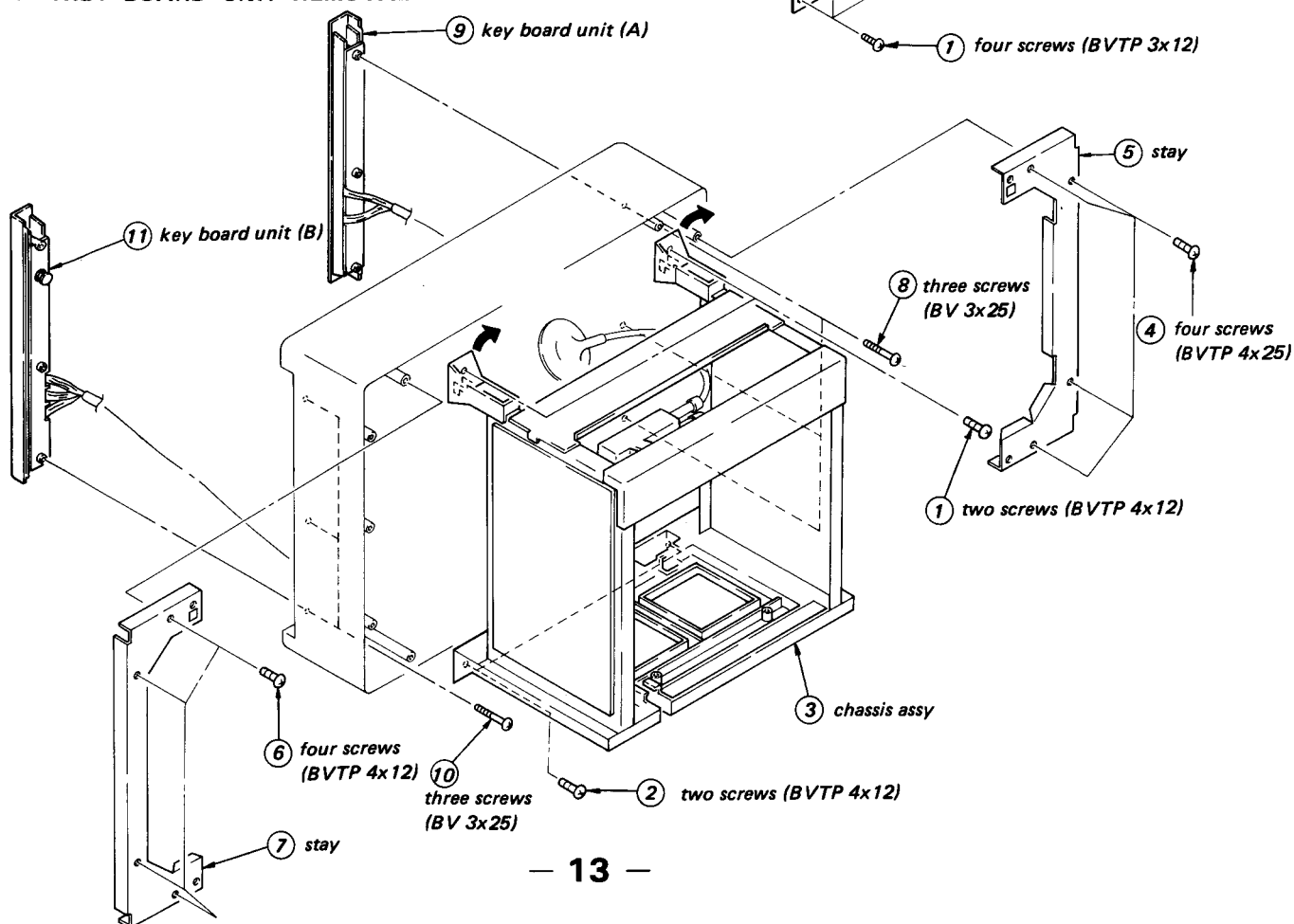
 CONTROL S signal flow

SECTION 2 DISASSEMBLY

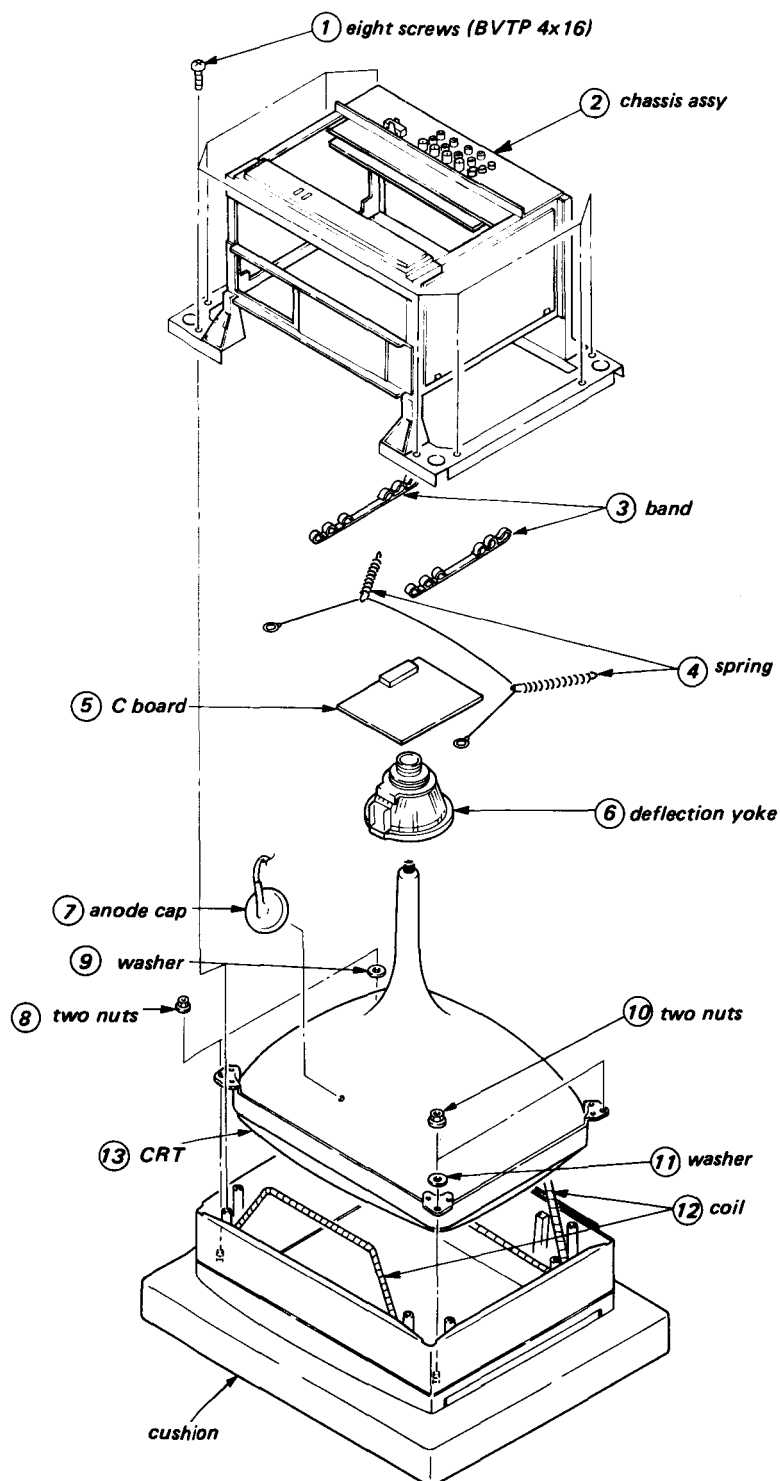
2-1. POWER BLOCK ASSY AND CHASSIS ASSY REMOVAL



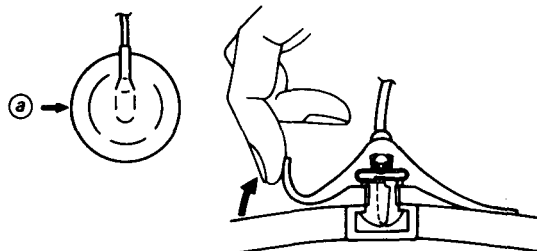
2-2. KEY BOARD UNIT REMOVAL



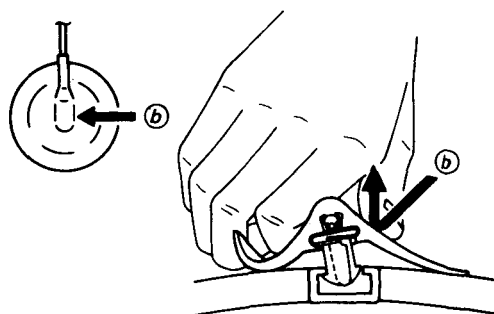
2-3. PICTURE TUBE REMOVAL



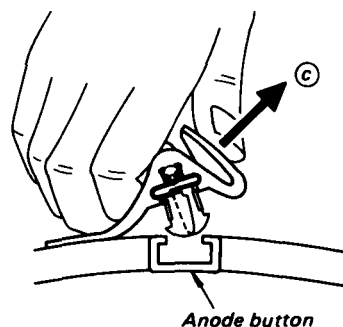
• Removing Procedures



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①



- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ②



- ③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③

SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required

1. Color-bar/Pattern Generator
2. Degausser

3-1. BEAM LANDING

Preparation:

- Input the RASTER pattern.
 - Before starting, degauss the entire screen.
1. Turn on set power supply and input a RASTER signal.
 2. Evenly degauss the entire screen.
 3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 3-1.
 4. Input a red signal.
 5. Move the deflection yoke back, and adjust the purity control so that RED is in the center and GREEN and BLUE are at the sides, evenly. (Figure 3-2.)
 6. Move the deflection yoke forward so that the entire screen is red.
 - If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
 7. Substitute GREEN, then BLUE for RED in step 4 and check landing.
 8. Rotate RED, GREEN and BLUE once each and check landing.
 9. When landing is not right, adjust the purity control and use magnets as shown in Figure 3-3, then repeat steps 7 and 8.
 10. When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.

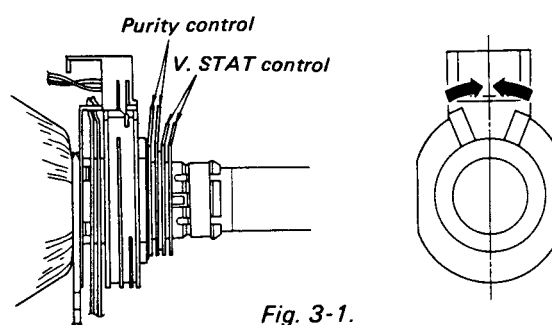


Fig. 3-1.

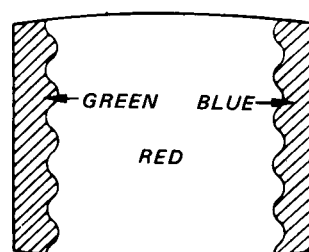


Fig. 3-2.

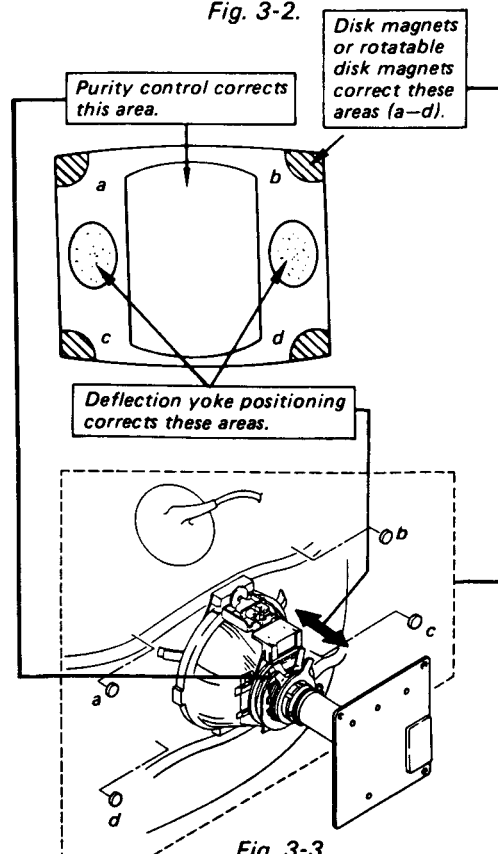


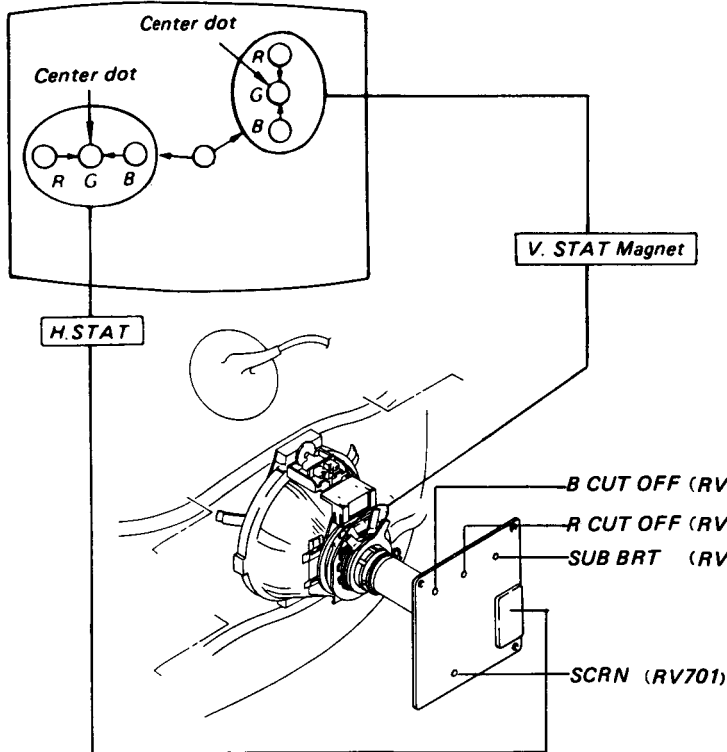
Fig. 3-3.

3-2. COVERAGE

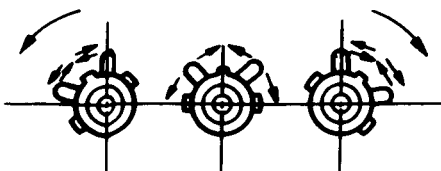
Preparation:

- Before starting, perform FOCUS, H. SIZE, V. SIZE and V. LIN adjustments.
- Set BRIGHTNESS control to fully counterclockwise.
- Feed in the dot pattern.

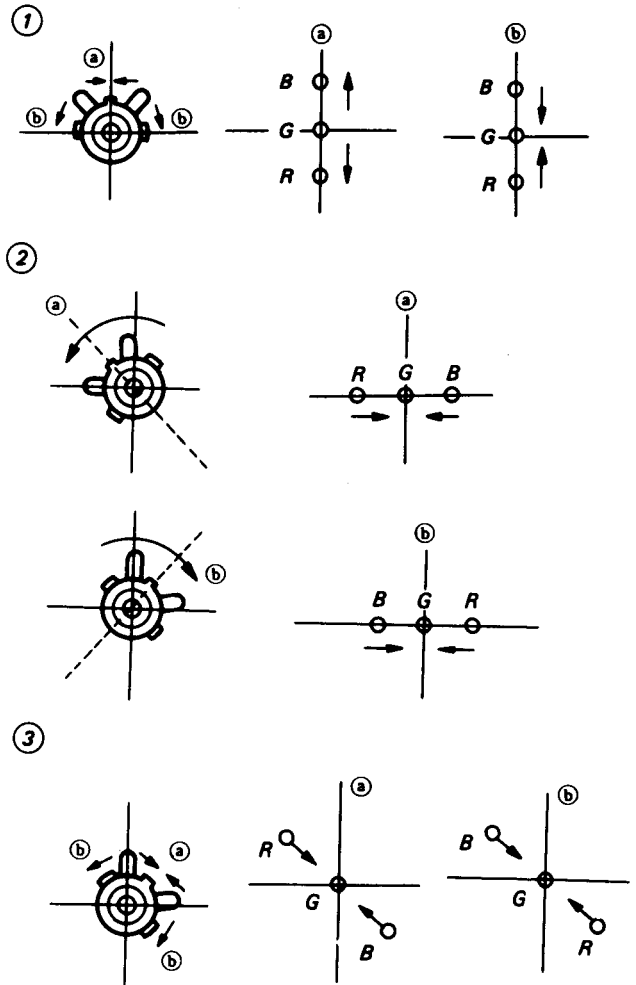
(1) Horizontal and Vertical Static Convergence



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement)
 2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
 3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



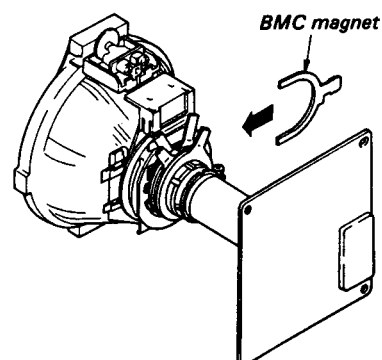
4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.



If blue dot does not coincide with red and green dots, perform following steps.

- Move BMC magnet (a) to correct insufficient H. static convergence.
- Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



(2) Dynamic Convergence Adjustment

Preparation:

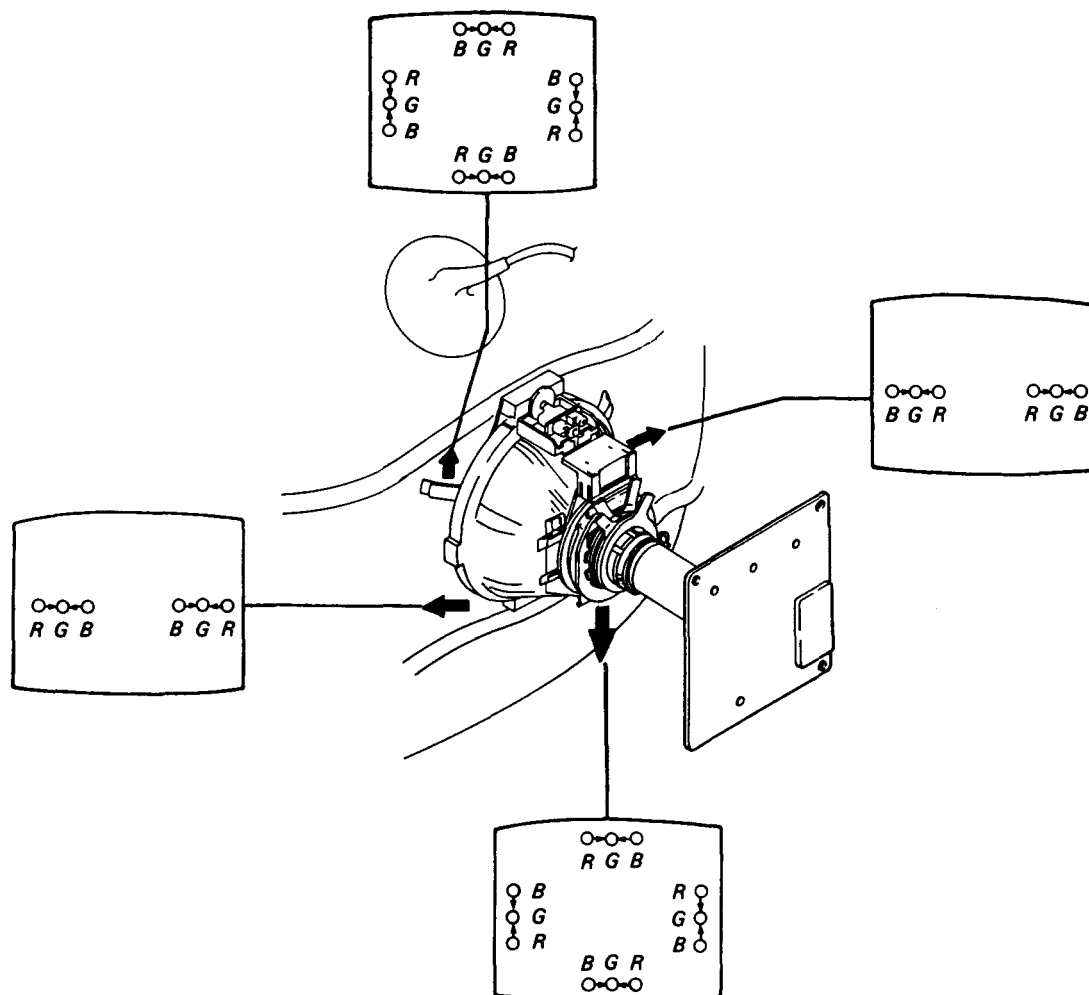
- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.

1. Loosen deflection yoke screw.
2. Remove deflection yoke spacers.

3. Move the deflection yoke for best convergence as shown below.

4. Tighten the deflection yoke screw.

5. Install the deflection yoke spacers.



3-3. WHITE BALANCE ADJUSTMENT

1) SCREEN (G_2) adjustment

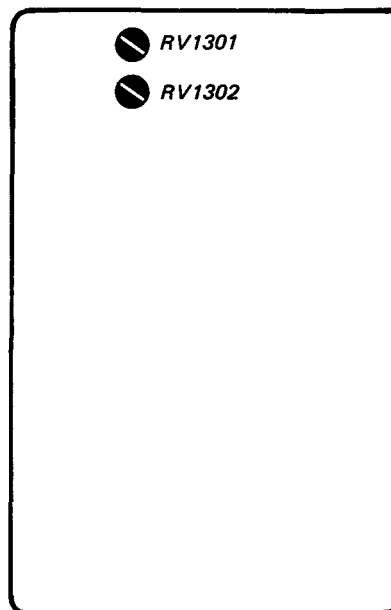
1. Confirm that G_1 line voltage is 30 ± 5 Vdc.
2. Adjust CUT OFF(R,B) so that R,B cathode voltage becomes 180 V DC.

Adjust with G_2 VT immediately prior to the disappearing of the luminescent line.

2) W/B adjustment

1. Input a all white signal.
2. Set the PICTURE control to minimum and turn the BRIGHT control mechanical center.
3. Set R CUT OFF(R,B) and RV703 (B CUT OFF) to minimum.
4. Turn RV701 (SUB BRT) slowly to obtain a faintly visible cross-hatch.
Note the color tjat first becomes visible by turning RV701.
5. Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hatch.
6. Set the PICTURE control fully clockwise.
Observe the screen and adjust the RV1301 (G,H/L), RV1302 (B,H/L) controls for best white balance. (B Board)
7. Repeat steps 1, through 7.

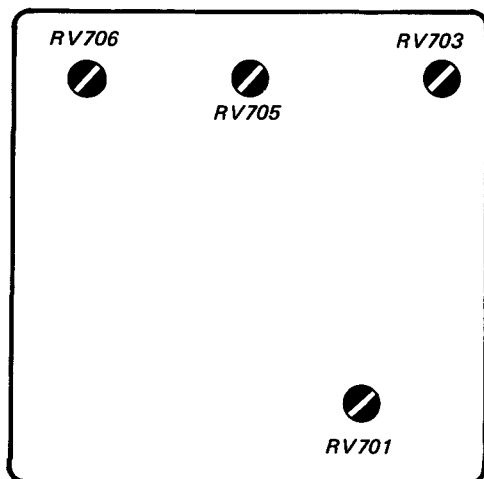
B Board



*RV1301 (G.H/L)
RV1302 (B.H/L)*

(Component side)

C Board



*RV703 (B CUT OFF)
RV705 (R CUT OFF)
RV706 (SUB. BRT)
RV701 (SCRN)*

(Component side)

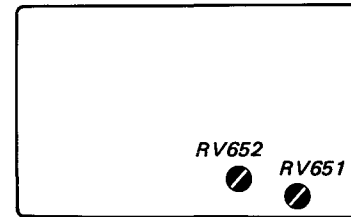
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. FA BOARDS ADJUSTMENT

+B Line Adjustment

1. Supply 220V ac to with variable auto-transformer.
2. Adjust RV651 so that the +B line is $140V \pm 0.5V$.
3. Adjust RV652 so that the pin ① or IC651 is $32 \pm 0.1V$.

FA Board



RV651 (+B ADJ)
RV652 (REF ADJ)

(Component side)

4-2. D BOARD ADJUSTMENTS

Horizontal Position Adjustment

1. Check that H center moves to the right and left with horizontal position VR (RV555), then adjust horizontal position to center.

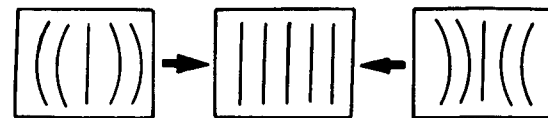
Picture Distortion Adjustment

1. Picture distortion adjustment
Input a signal equivalent to a crosshatch signal.

PIN PHASE (RV553)



PIN AMP (RV552)



2. Adjust RV554 (H.SIZE) so that H.SIZE is best.
3. Adjust RV555 (H.CENT) so that horizontal position is center.

V.SIZE V.CENT

Adjust RV503 and RV509 for a best vertical SIZE Picture.

H.FREQ Adjustment

1. Input a color bar signal and short between IC501 pins ① and ①①.
Also short board IC401 pins ③⑤ and ③⑥.
2. Adjust H.FREQ VR (RV501) so that picture flow is as shown in Figure.
3. After adjustment, remove the connections in step ①.

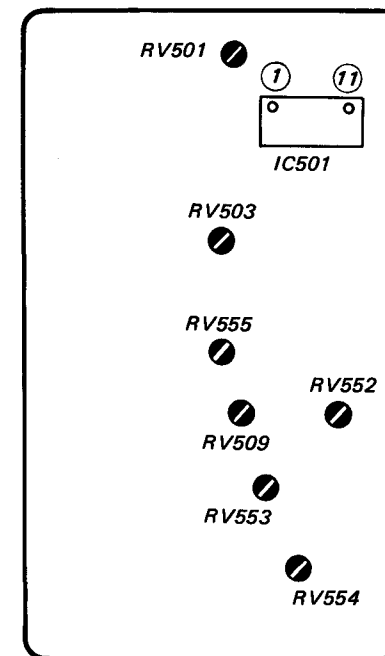


fo low

fo correct
(fo=15.734Hz)

fo high

D Board



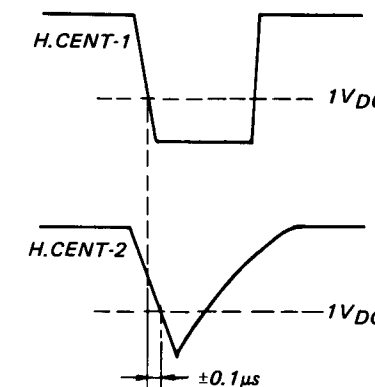
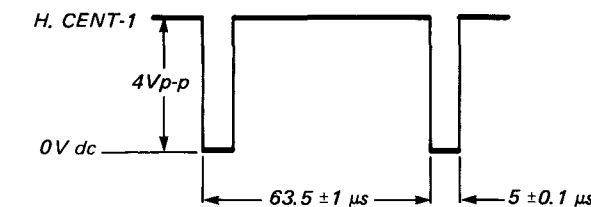
(Component side)

RV501 (H.FREQ)
IC501 1 11 (H FREQ)
RV503 (V.SIZE)
RV555 (H.CENT)
RV552 (PIN AMP)
RV509 (V.CENT)
RV553 (PIN PHASE)
RV554 (H.SIZE)

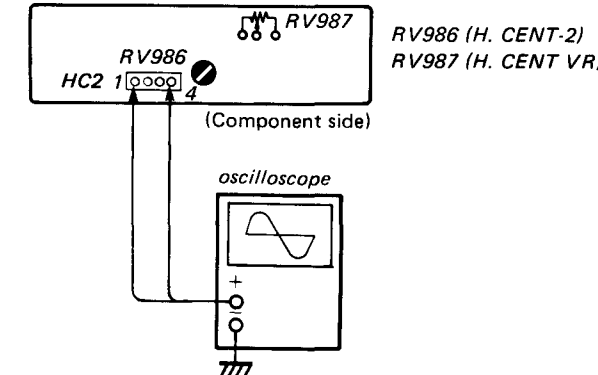
4-3. HC BOARD ADJUSTMENT

H. CENTER Adjustment (DIGITAL RGB)

1. Connect to the digital RGB output connector of a microcomputer.
2. Press to select the RGB mode.
3. Turn the H. CENT VR (RV987--- Rear control panel) to center position.
4. Connect the oscilloscope to pin ④ of HC-2 connector and pin ① of HC-2 connector.
5. Adjust RV986 (H. CENT-2) so that the phase difference level is $\pm 0.1\mu\text{sec}$.



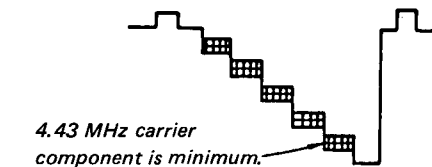
HC Board



4-4. B BOARD ADJUSTMENTS

Y Chroma Adjustment

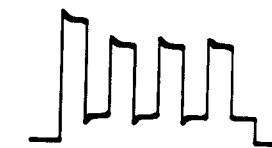
1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin ③⑤ of IC301, and adjust so that chroma component is minimum on pin ③⑤ of IC301 waveform while tracking with L451 (4.43 MHz).



3. Input a NTSC (3.58) color bar signal.
4. Connect an oscilloscope to pin ③⑤ of IC301 and adjust so that chroma component is minimum on pin ③⑤ of IC301 waveform while tracking with L452.

COLOR BALANCE Adjustment

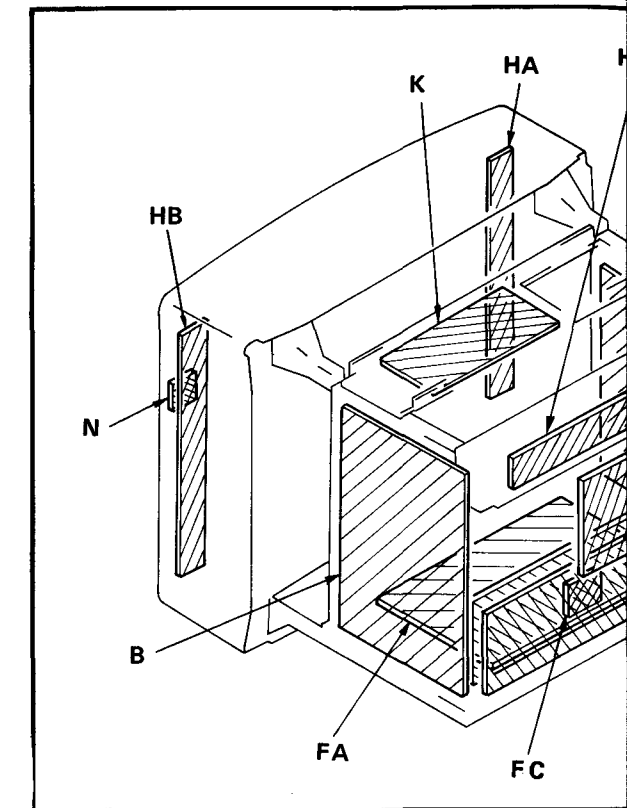
1. Input a SECAM color bar signal and set PICTURE to maximum.
Press "RESET" to set color to standard state.
2. Observe blue output (TP33) waveform on the oscilloscope and adjust L421 (B-Y) so that the black portion of the color bar is the same level as the pedestal.



3. Observe blue output (TP31) waveform on the oscilloscope and adjust L405 (R-Y) so that the black portion of the color bar is the same level as the pedestal.



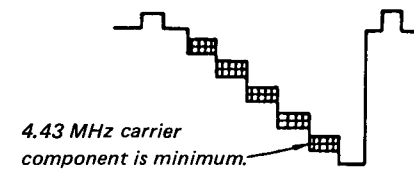
5-1. CIRCUIT BOARDS LOCATION



4-4. B BOARD ADJUSTMENTS

Y Chroma Adjustment

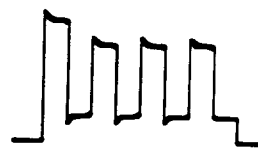
1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin (35) of IC301, and adjust so that chroma component is minimum on pin (35) of IC301 waveform while tracking with L451 (4.43 MHz).



3. Input a NTSC (3.58) color bar signal.
4. Connect an oscilloscope to pin (35) of IC301 and adjust so that chroma component is minimum on pin (35) of IC301 waveform while tracking with L452.

COLOR BALANCE Adjustment

1. Input a SECAM color bar signal and set PICTURE to maximum. Press "RESET" to set color to standard state.
2. Observe blue output (TP33) waveform on the oscilloscope and adjust L421 (B-Y) so that the black portion of the color bar is the same level as the pedestal.



3. Observe blue output (TP31) waveform on the oscilloscope and adjust L405 (R-Y) so that the black portion of the color bar is the same level as the pedestal.



ANTI-PAL, LINE CRAWLING Adjustment

1. Input a PAL color bar signal and set PICTURE to maximum. Press "RESET" to set COLOR, HUE and BRT to standard state.
2. Confirm that there is no color on the first anti-PAL signal frames at the right and left of the picture. If sides while tracking with RV303.
3. Adjust T301 (DAT) for minimum line crawling.
4. Confirm the anti-PAL adjustment in 2, and repeat 3, and 1 if necessary.

APC Adjustment

4.43 adjustment

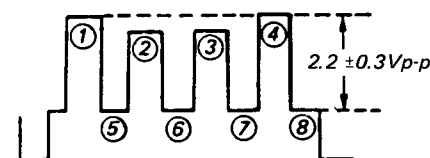
1. Input a PAL color bar signal.
2. Short pin (11) and pin (12) on IC301.
3. Adjust CT443 to get color sync.

3.58 adjustment

4. Input a NTSC (3.58 MHz) color bar signal.
5. Adjust CT358 to get color sync.

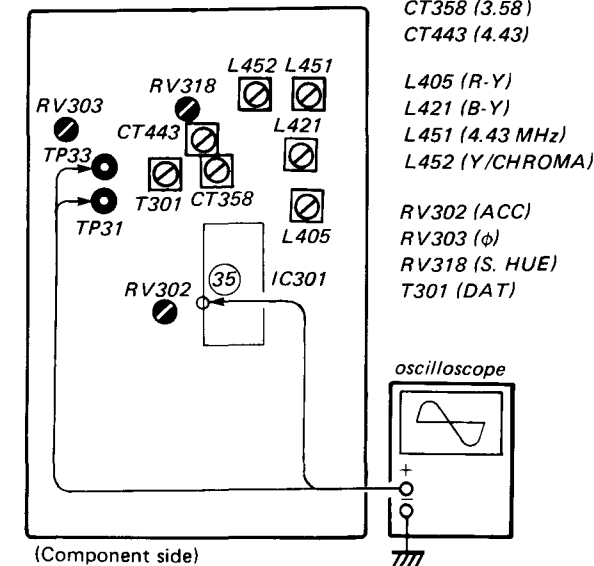
ACC, HUE CENT Adjustment

1. Input a PAL color bar signal and set PICTURE maximum.
2. Adjust RV302 (ACC ADJ) so that blue output (TP33) waveform is as shown in figure.



3. Input a NTSC (3.58 or 4.43) color bar signal and set PICTURE to maximum. Press "RESET" to set COLOR, HUE and BRIGHTNESS to standard state.
4. Adjust RV318 (S. HUE) so that blue output (TP33) waveform is as shown in figure.

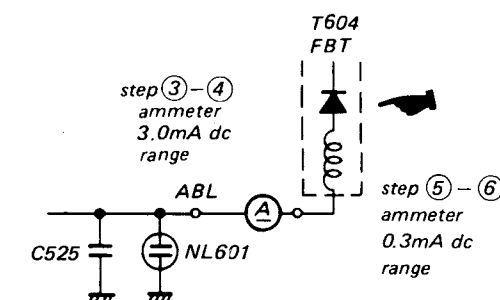
B Board

CT358 (3.58)
CT443 (4.43)L405 (R-Y)
L421 (B-Y)
L451 (4.43 MHz)
L452 (Y/CHROMA)RV302 (ACC)
RV303 (φ)
RV318 (S. HUE)
T301 (DAT)

4-5. SAFETY CHECK ADJUSTMENT

HOLD DOWN ADJUSTMENT (*R531)

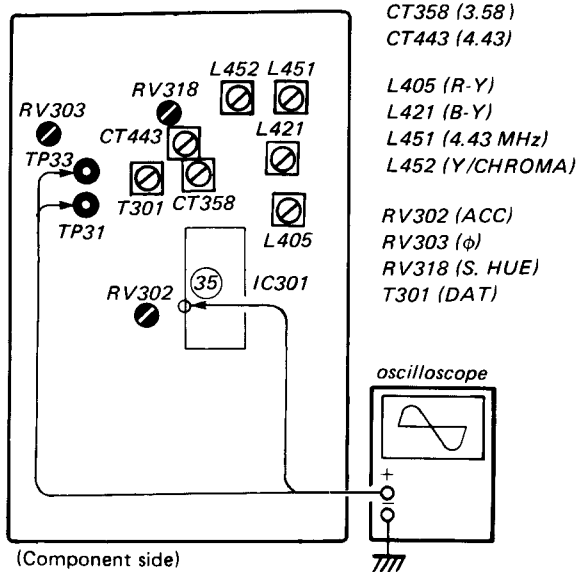
1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS control to maximum.
 2. Confirm that the voltage of the IC1510 (1) pin is more than 15.78V DC when the set is operating normally with 120V AC supply.
 3. Adjust ABL current to $1400 \pm 30 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 3.0mA dc range)
 4. Confirm that there is less than 18.35V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
 5. Adjust ABL current to $210 \pm 3 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 0.3mA dc range)
 6. Confirm that there is less than 19.25V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
- Note: If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
7. If above steps is not satisfied, select resistance value of R597 and repeat above steps 1 through 6.



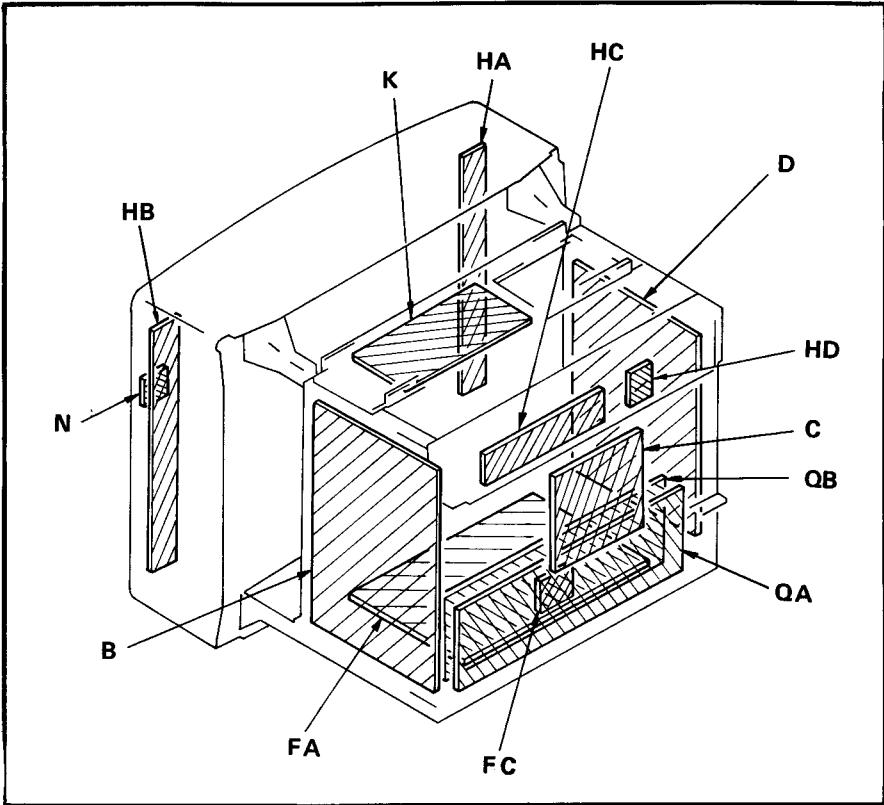
SECTION 5

DIAGRAMS

B Board



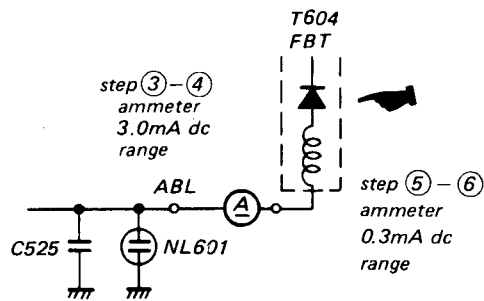
5-1. CIRCUIT BOARDS LOCATION



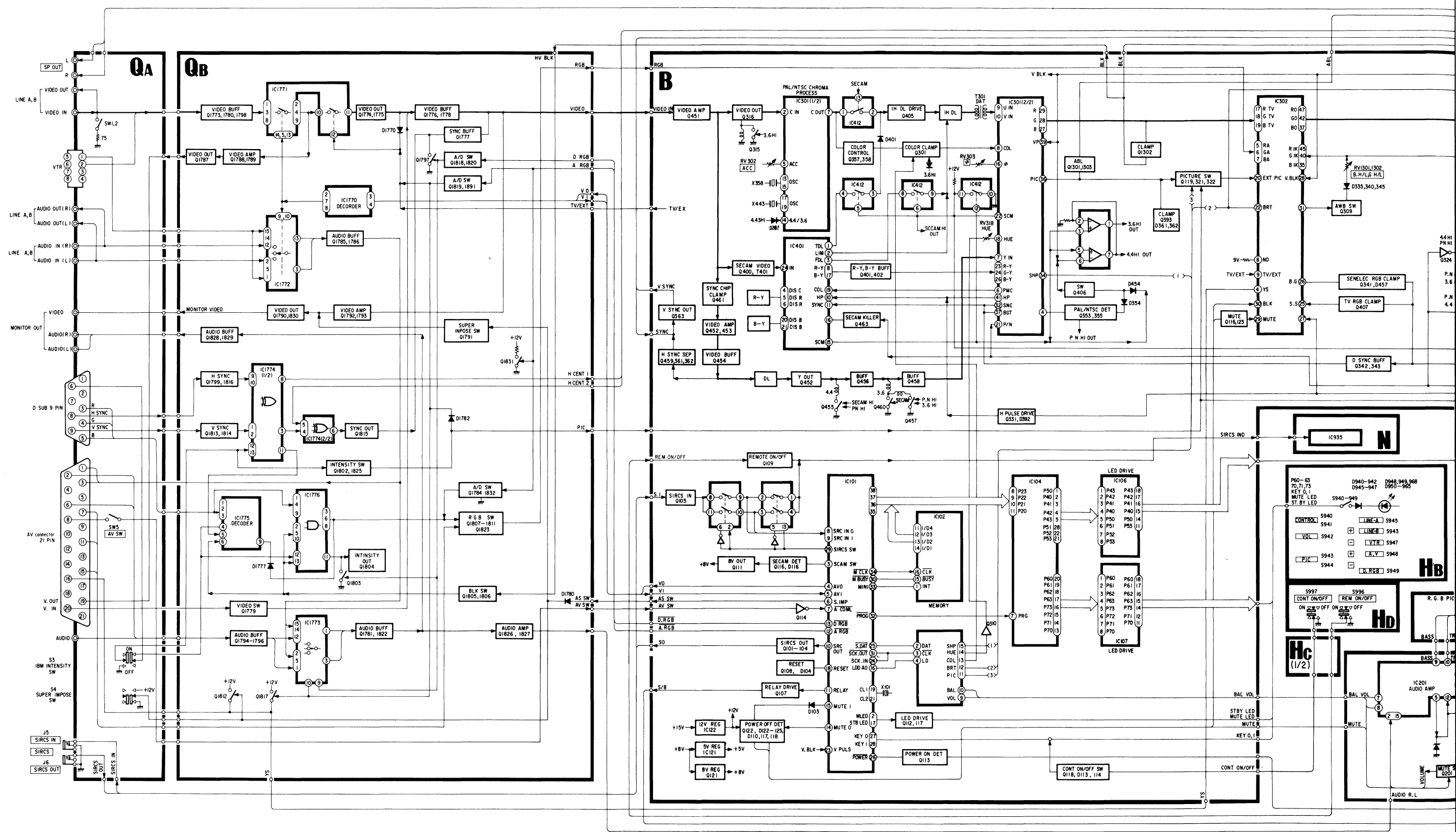
4-5. SAFETY CHECK ADJUSTMENT

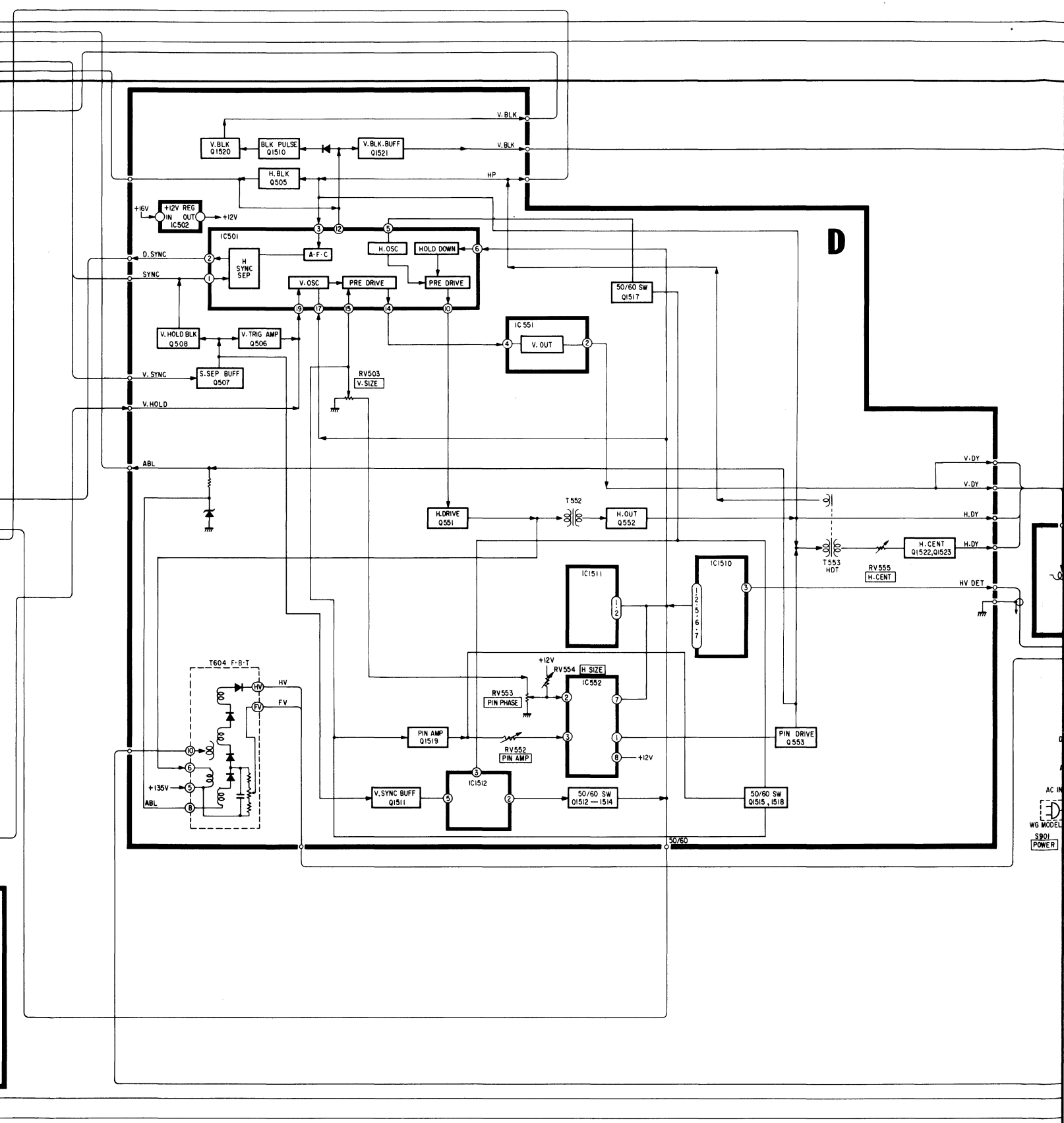
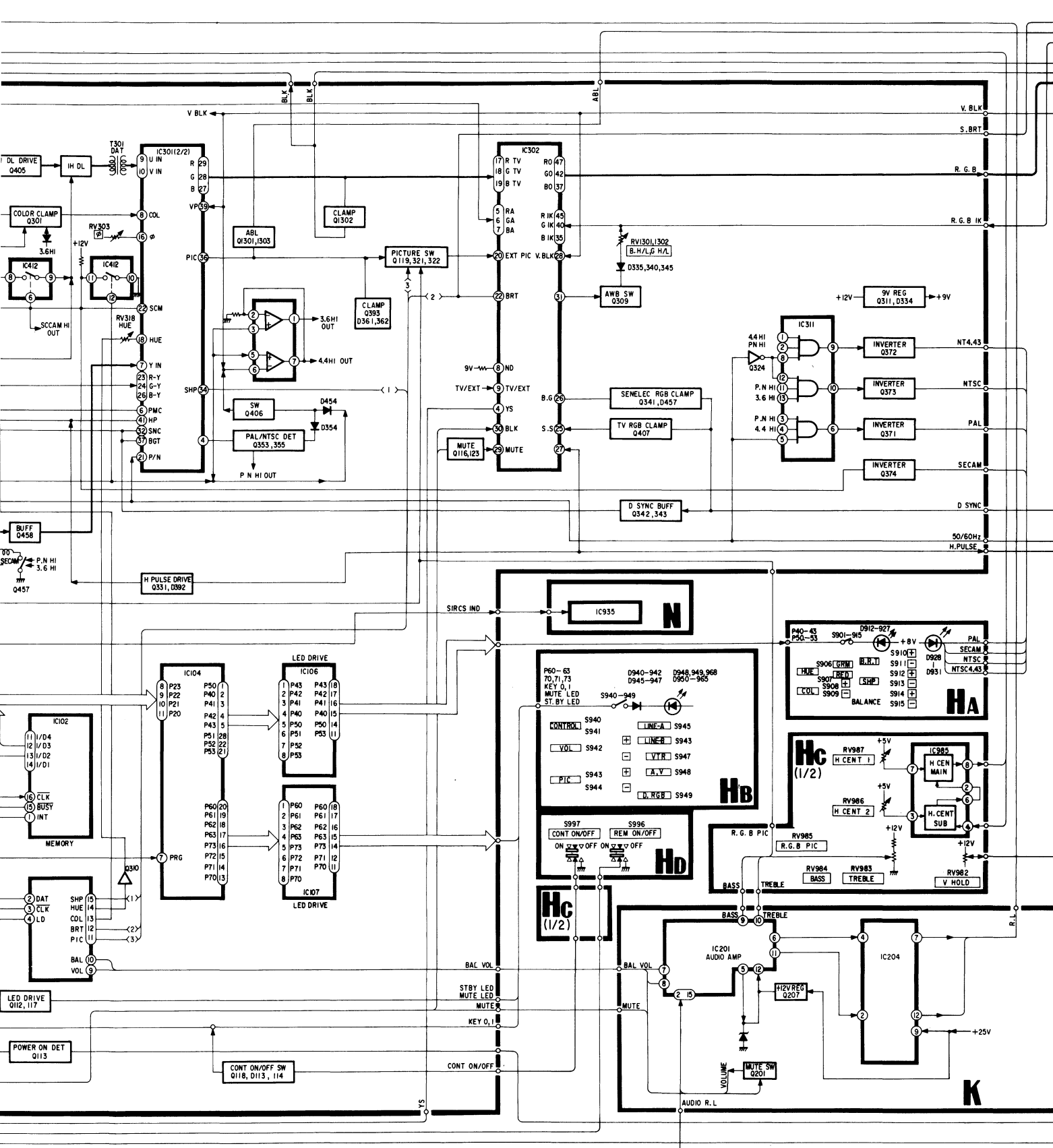
HOLD DOWN ADJUSTMENT (*R531)

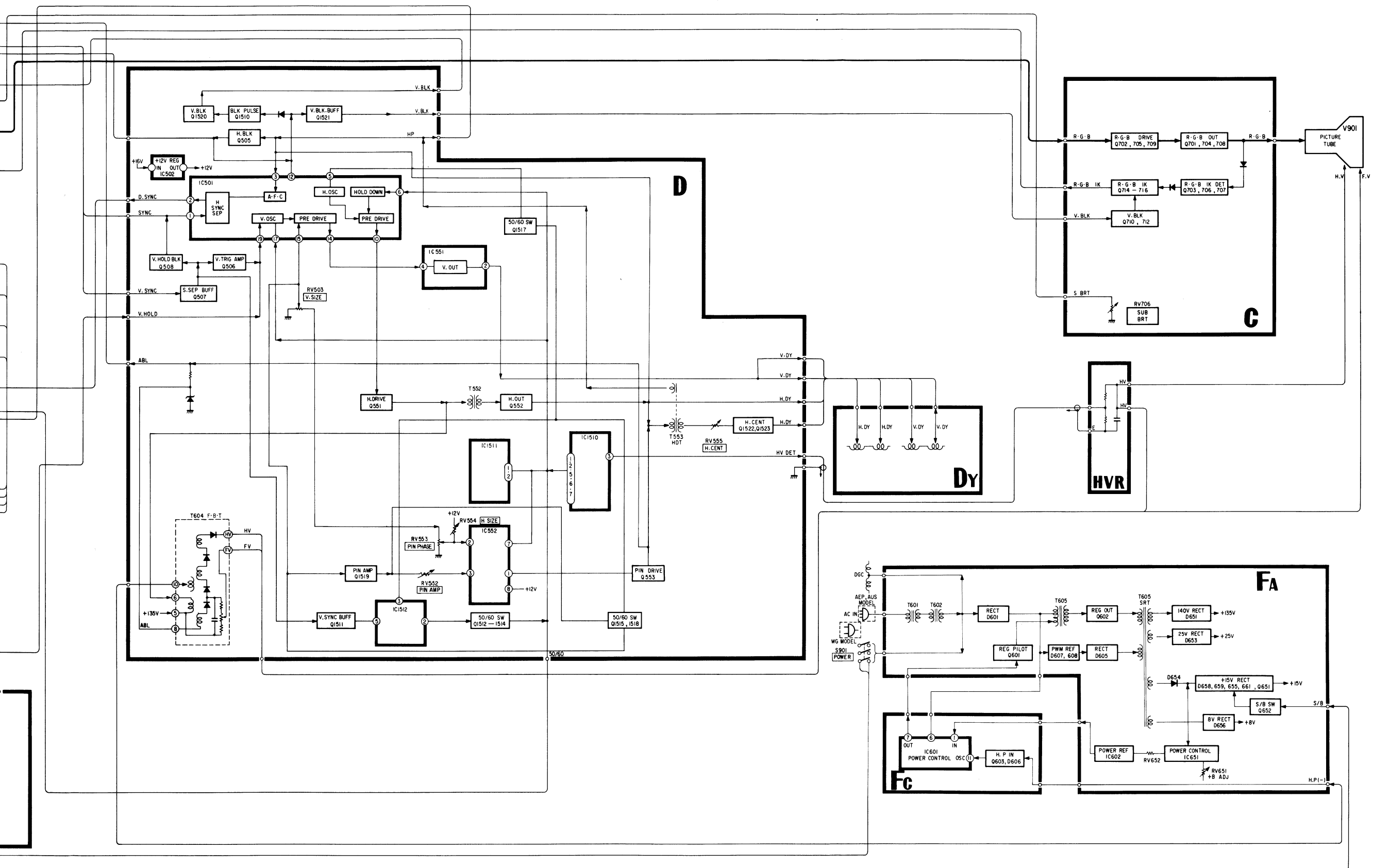
- Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS control to maximum.
 - Confirm that the voltage of the IC1510 ① pin is more than 15.78V DC when the set is operating normally with 120V AC supply.
 - Adjust ABL current to $1400 \pm 30 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 3.0mA dc range)
 - Confirm that there is less than 18.35V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 ① pin)
 - Adjust ABL current to $210 \pm 3 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 0.3mA dc range)
 - Confirm that there is less than 19.25V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 ① pin)
- Note: If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
7. If above steps is not satisfied, select resistance value of R597 and repeat above steps 1 through 6.



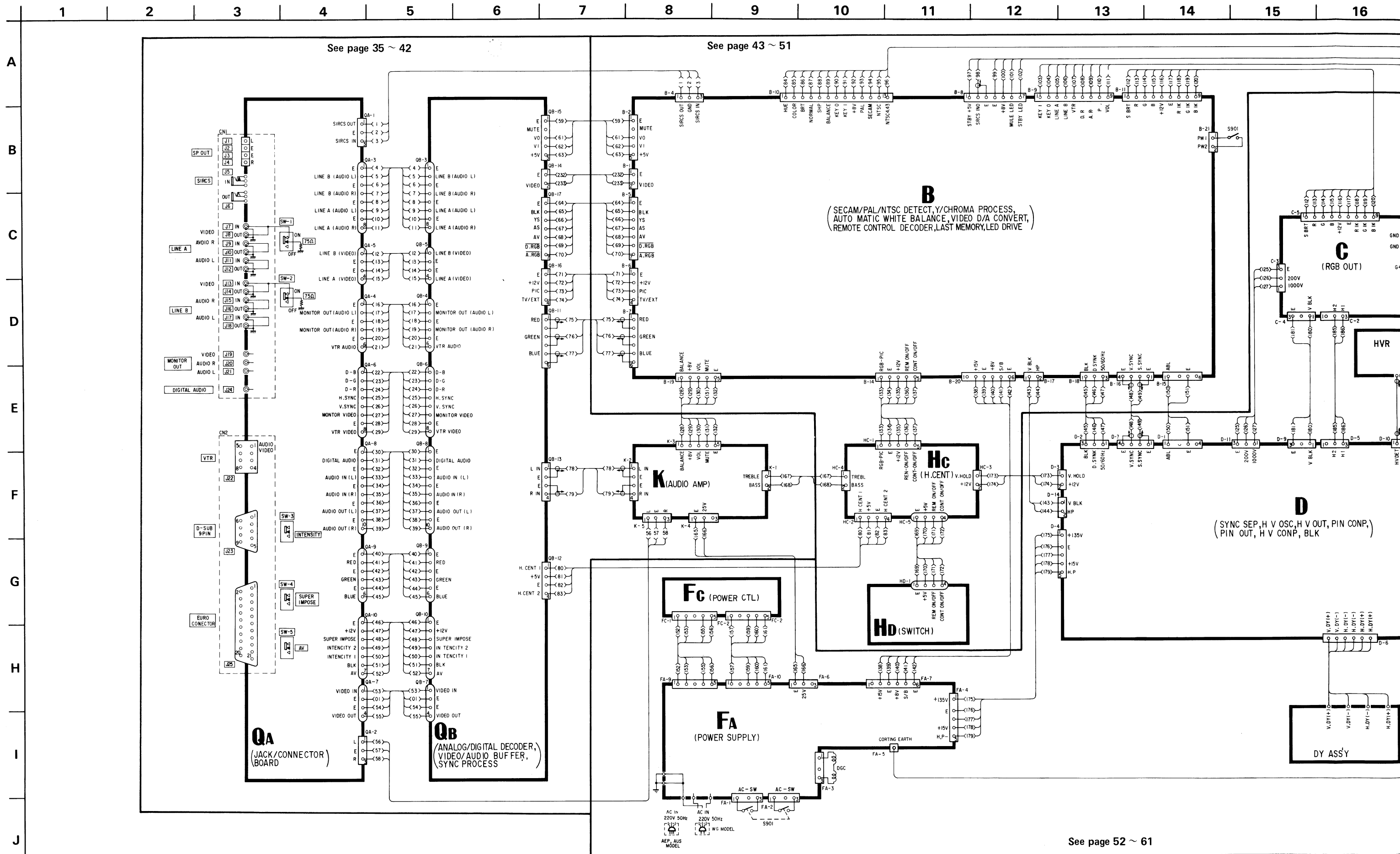
5-2. BLOCK DIAGRAM

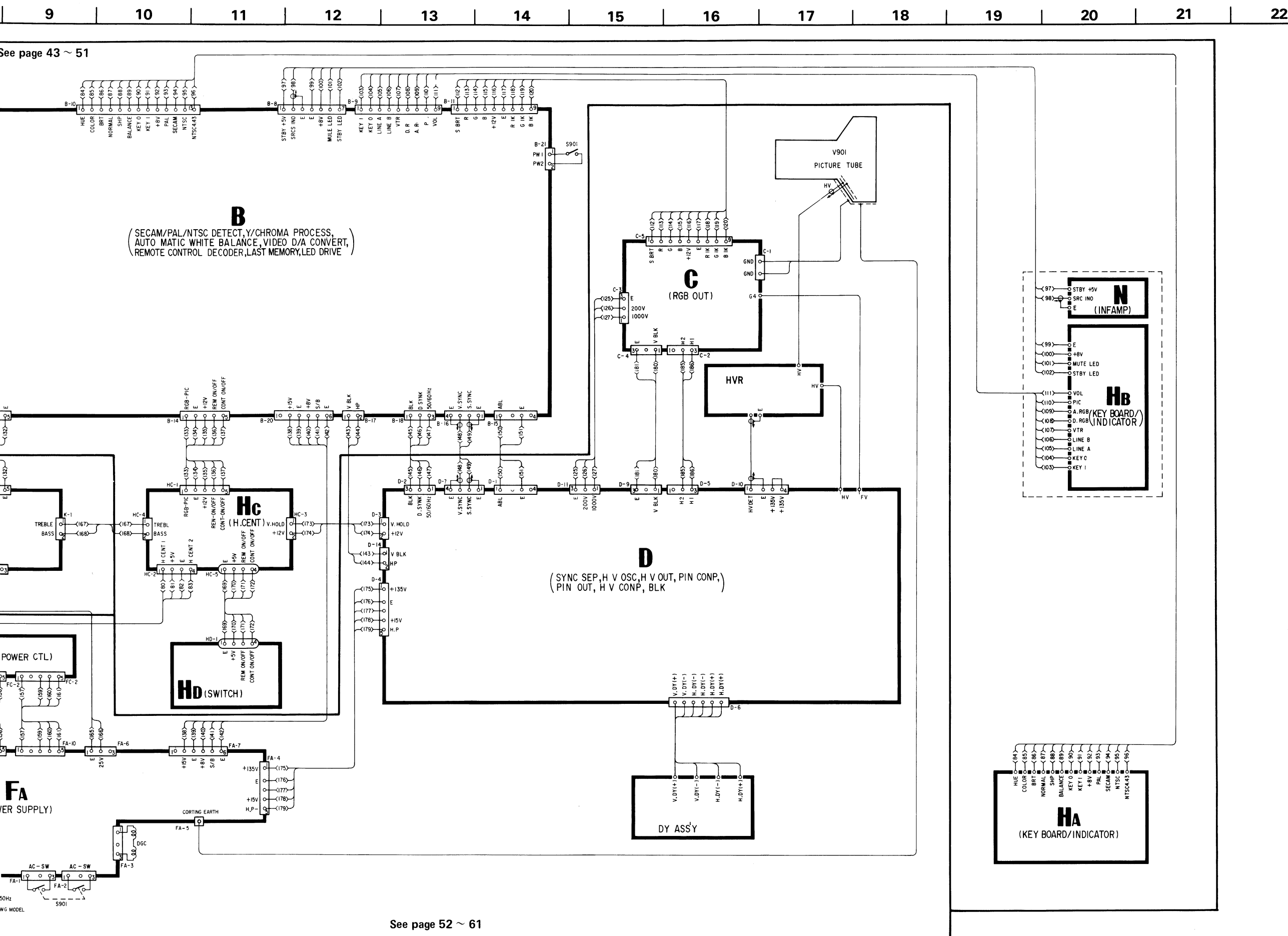






5-3. FRAME SCHEMATIC DIAGRAM





19

20

21

22

A

B

C

D

E

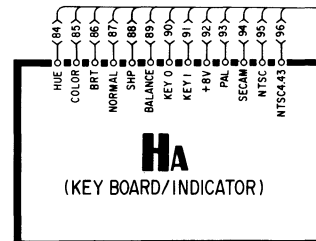
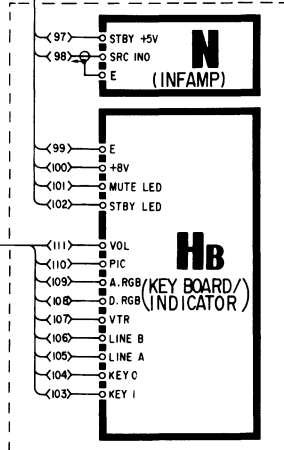
F

G

H







I

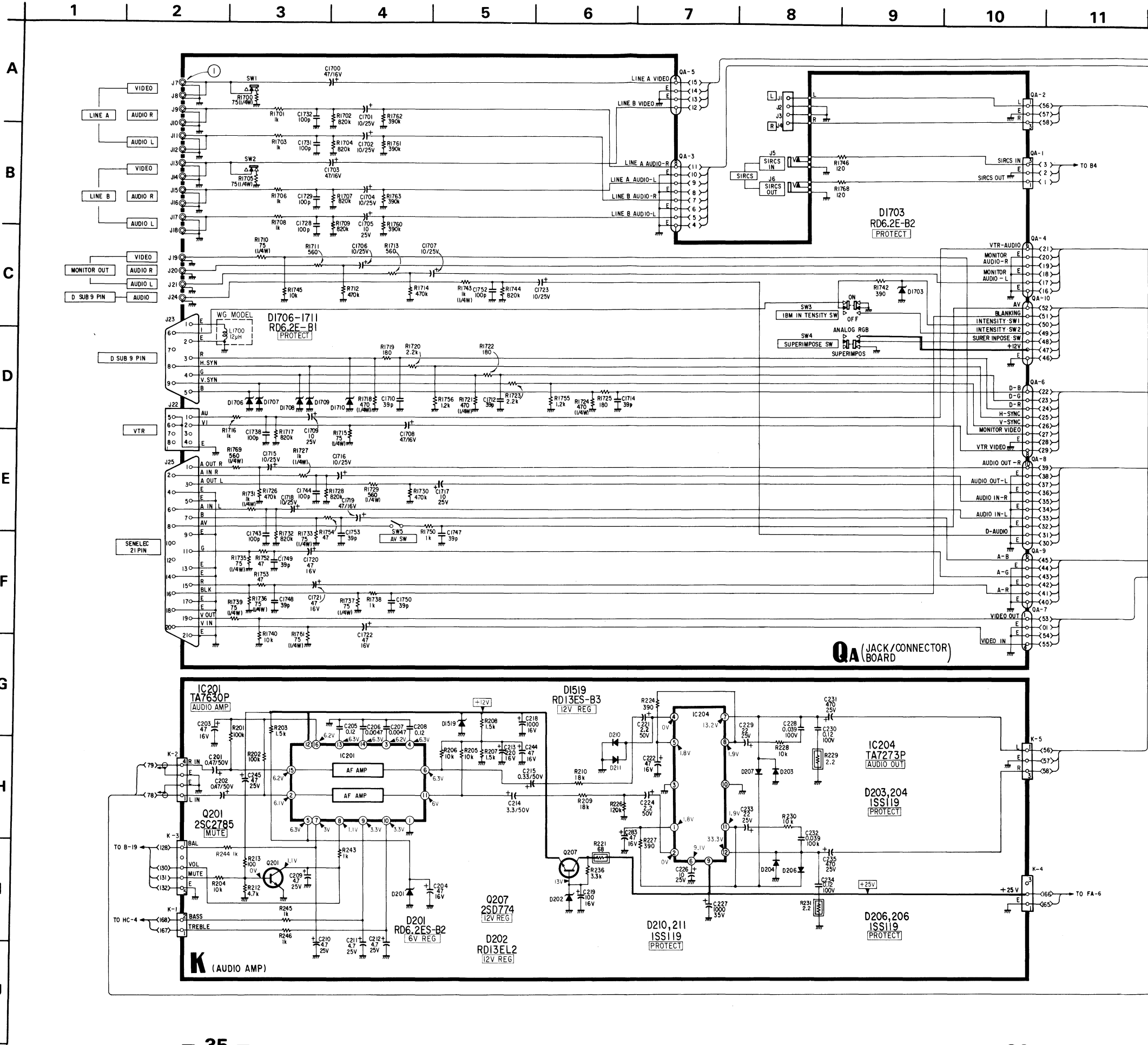
J

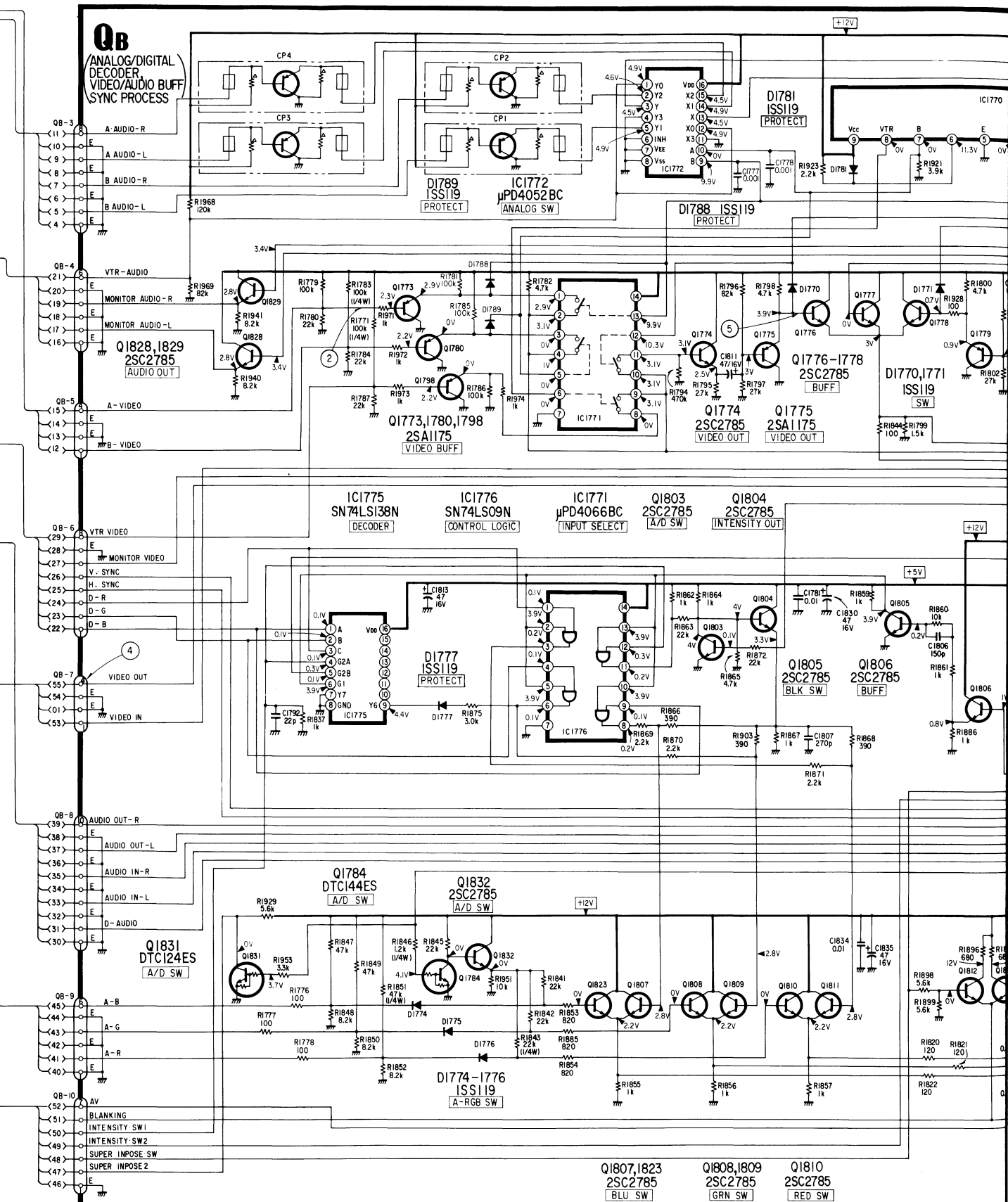
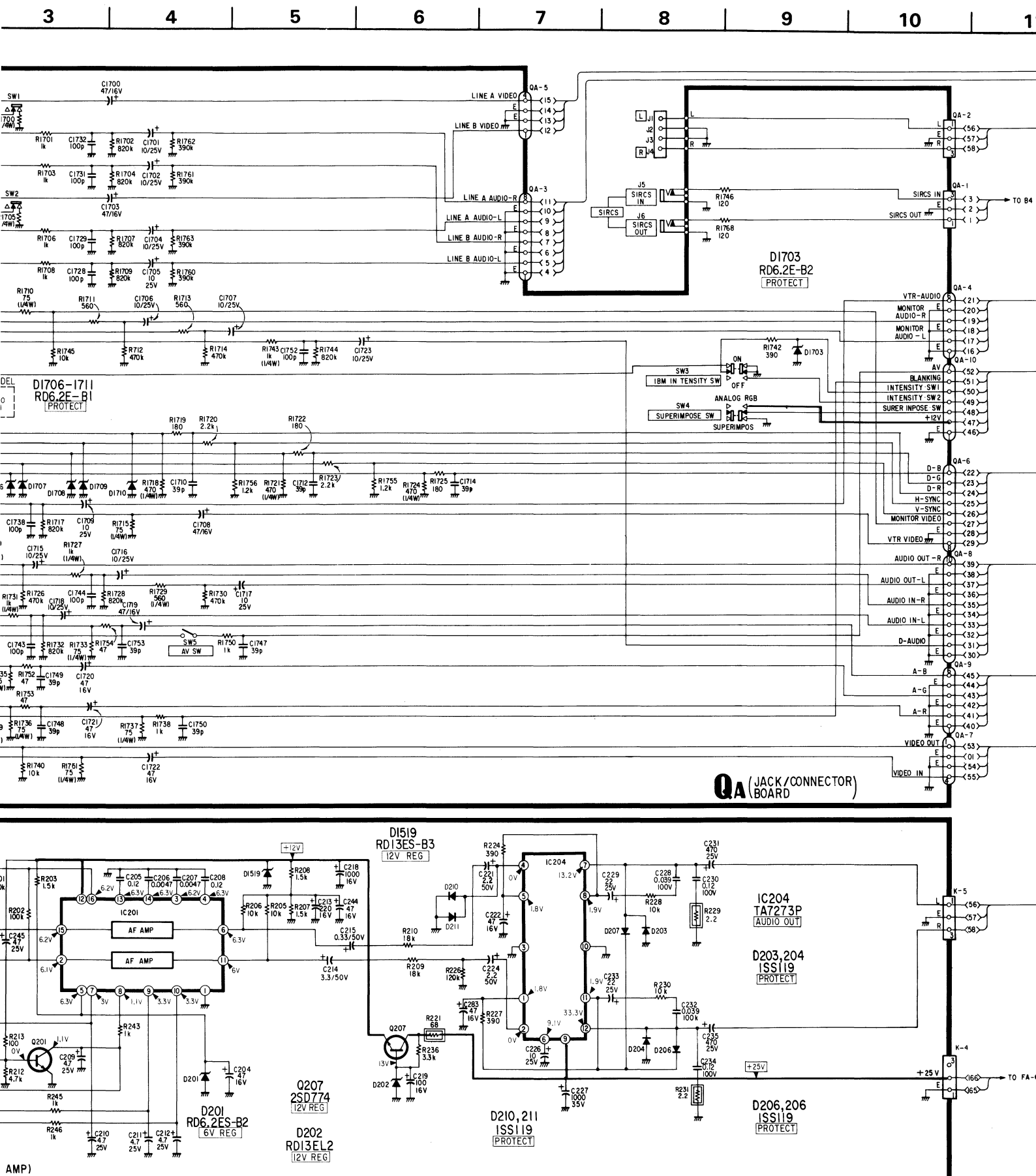


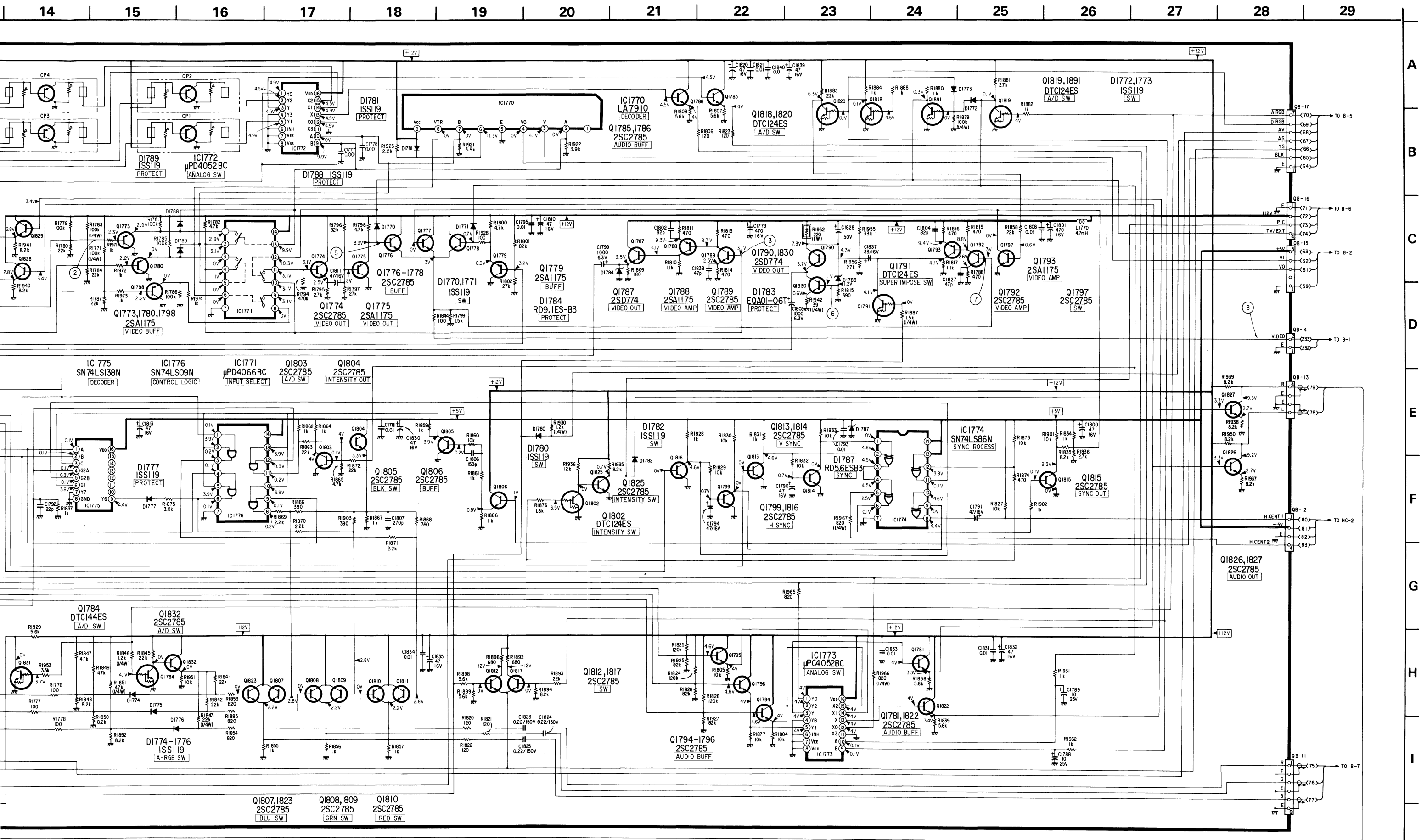
5-4. SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
50WV or less are not indicated except for electrolytics.
 p : μF
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted.
 $\text{k}\Omega$: 1000 Ω , $\text{M}\Omega$: 1000 $\text{k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : internal component.
-  : panel designation.
-  : adjustment for repair.
-  : B+ bus.
-  : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar-signal input.
- no mark : with PAL color-bar signal received.
- () : with SECAM color-bar signal received.
- < > : with NTSC (3.58) color-bar signal received.
- [] : with NTSC (4.43) color-bar signal received.
- * : Selected to yield optimum performance.







QA

ANALOG/DIGITAL DECODER,
VIDEO/AUDIO BUFFER,
SYNC PROCESS.

QB

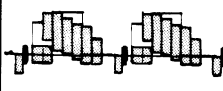

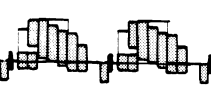
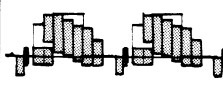
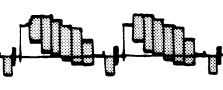
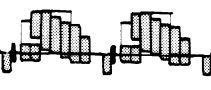

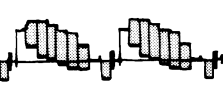
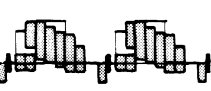
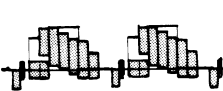
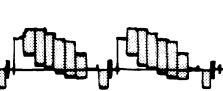
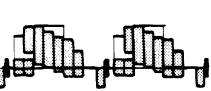
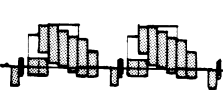


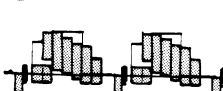


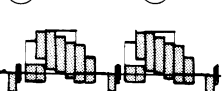
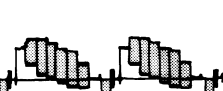

QB

QA

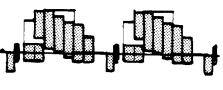
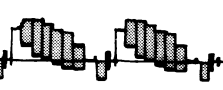
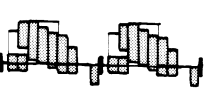
(JACK/CONNECTOR)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

【QB BOARD】

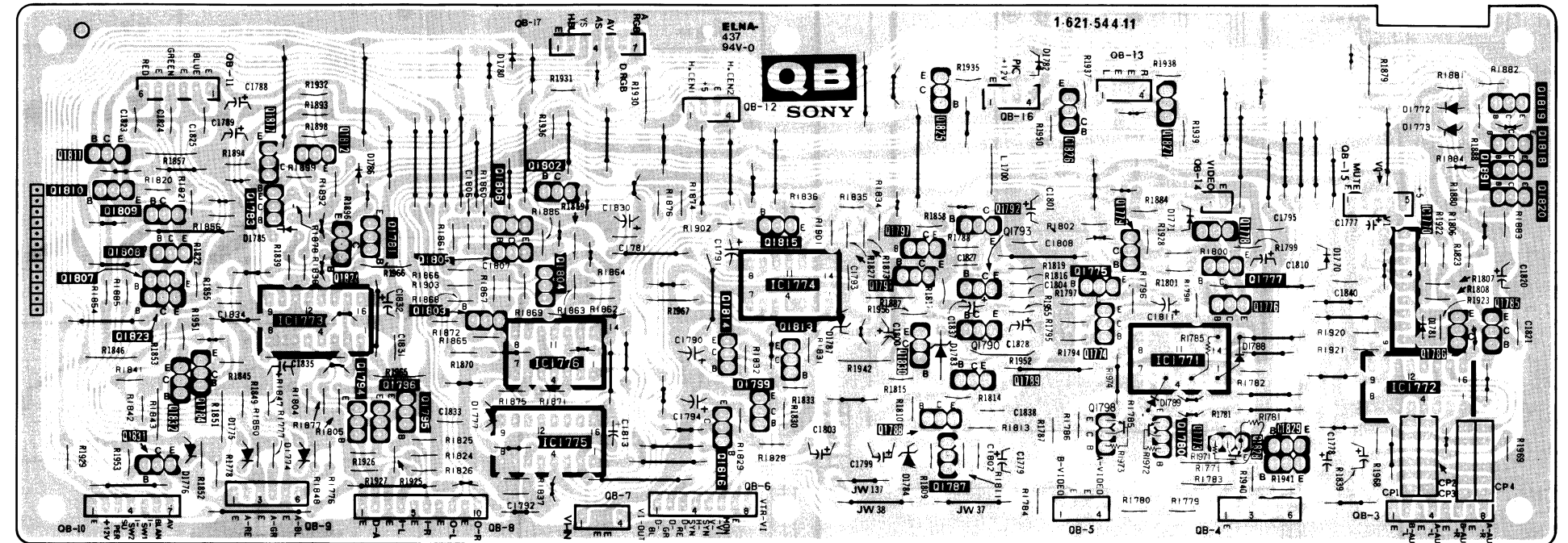
	PAL	SECAM	NTSC 3.58 4.43
A			
B	② Q1773 B  1Vp-p(H)	 1Vp-p(H)	 1Vp-p(H)
C	③ Q1789 B  1Vp-p(H)	 1Vp-p(H)	 1Vp-p(H)
D	④ QB-7 ④  2Vp-p(H)	 2Vp-p(H)	 2Vp-p(H)
E	⑤ Q1776 B  0.9Vp-p(H)	 0.9Vp-p(H)	 0.9Vp-p(H)
F	⑥ Q1830 C  2Vp-p(H)	 2Vp-p(H)	 2Vp-p(H)
G	⑦ Q1792 B  0.9Vp-p(H)	 0.9Vp-p(H)	 0.9Vp-p(H)
H	⑧ QB-14 ②  0.9Vp-p(H)	 0.9Vp-p(H)	 0.9Vp-p(H)

【QA BOARD】

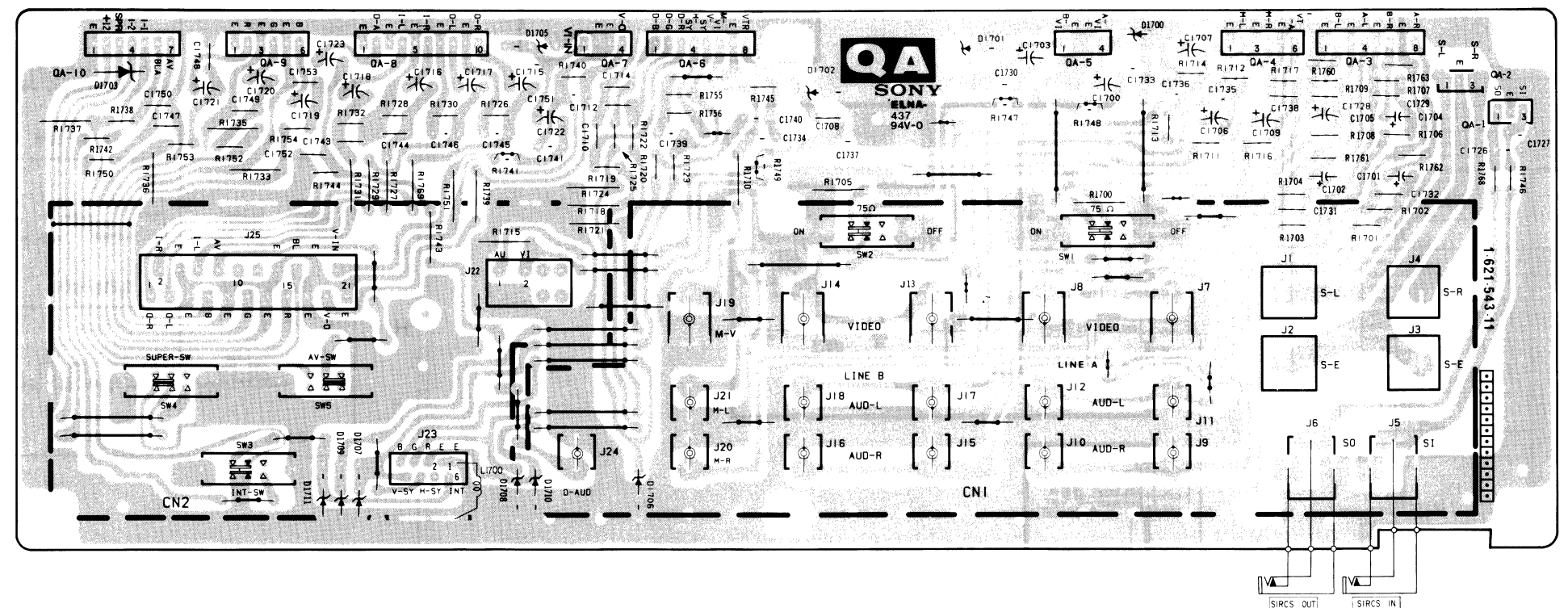
I	① LINEA J7  1Vp-p(H)	 1Vp-p(H)	 1Vp-p(H)
J			

QA Board

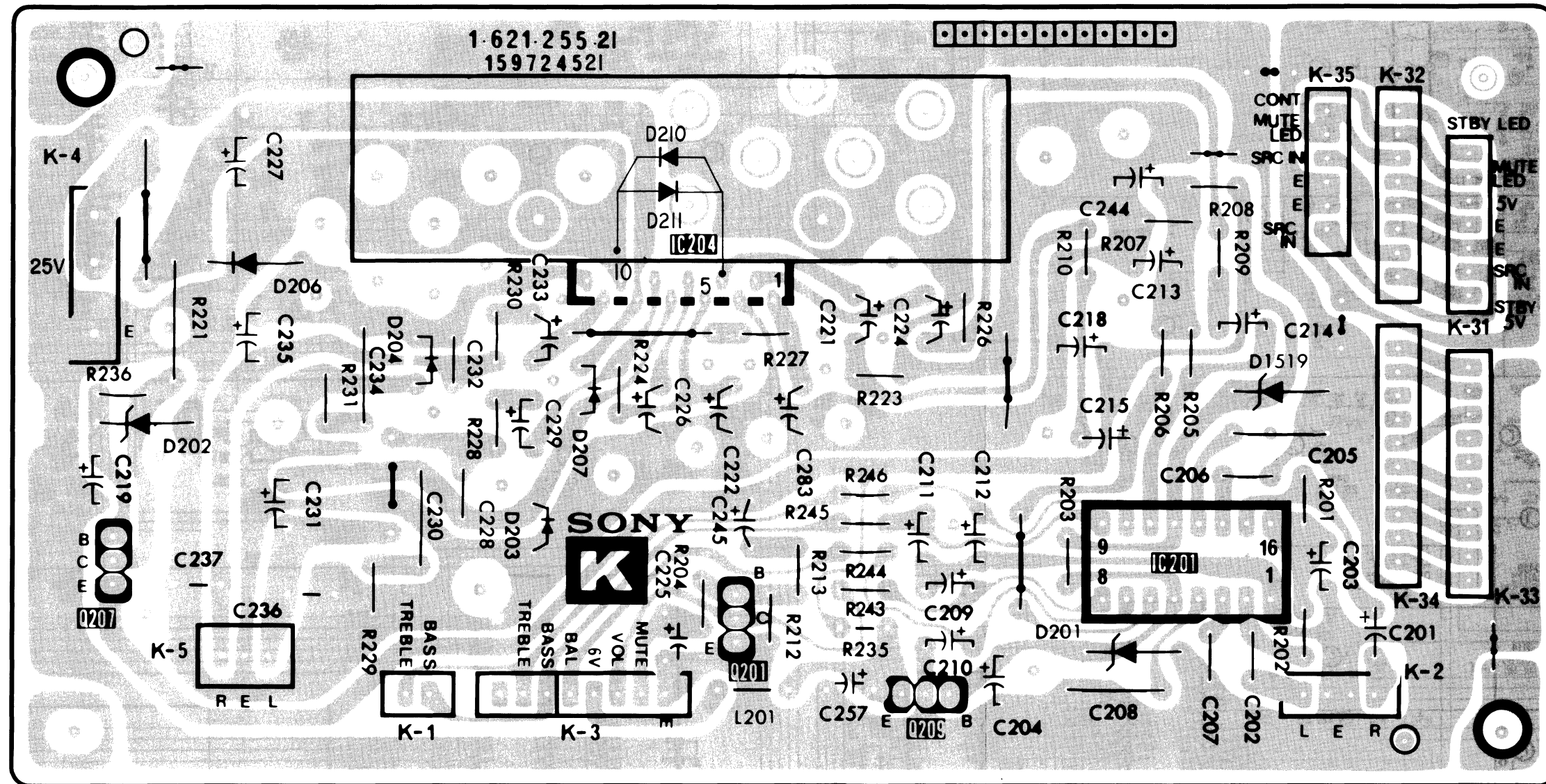
IC	1811	1810	1809	1808	1823	1831	1807	1804	1803	1805	1806	1802	1815	1825	1826	1827	1828	1829	1819	IC1770	IC1772	1785	1786	1818	1819	1820	IC
Q																											Q
D	1703	1776	1775	1774	1771	1709	1707	1777, 1708, 1710	1706	1787	1784	1783	1782	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	D



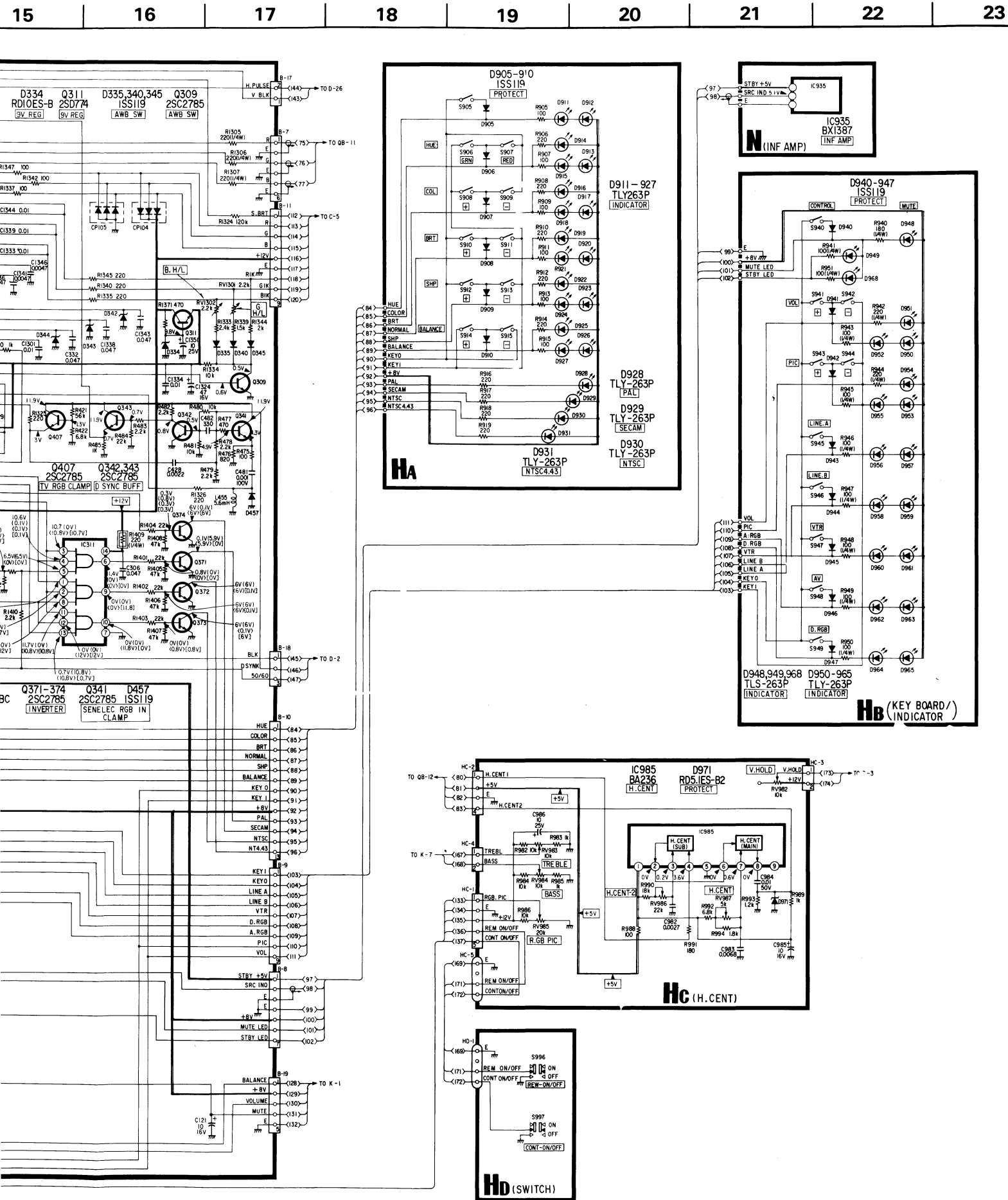
QB Board



K Board







[B BOARD]

A

B

C

D

E

F

G

H

I

J

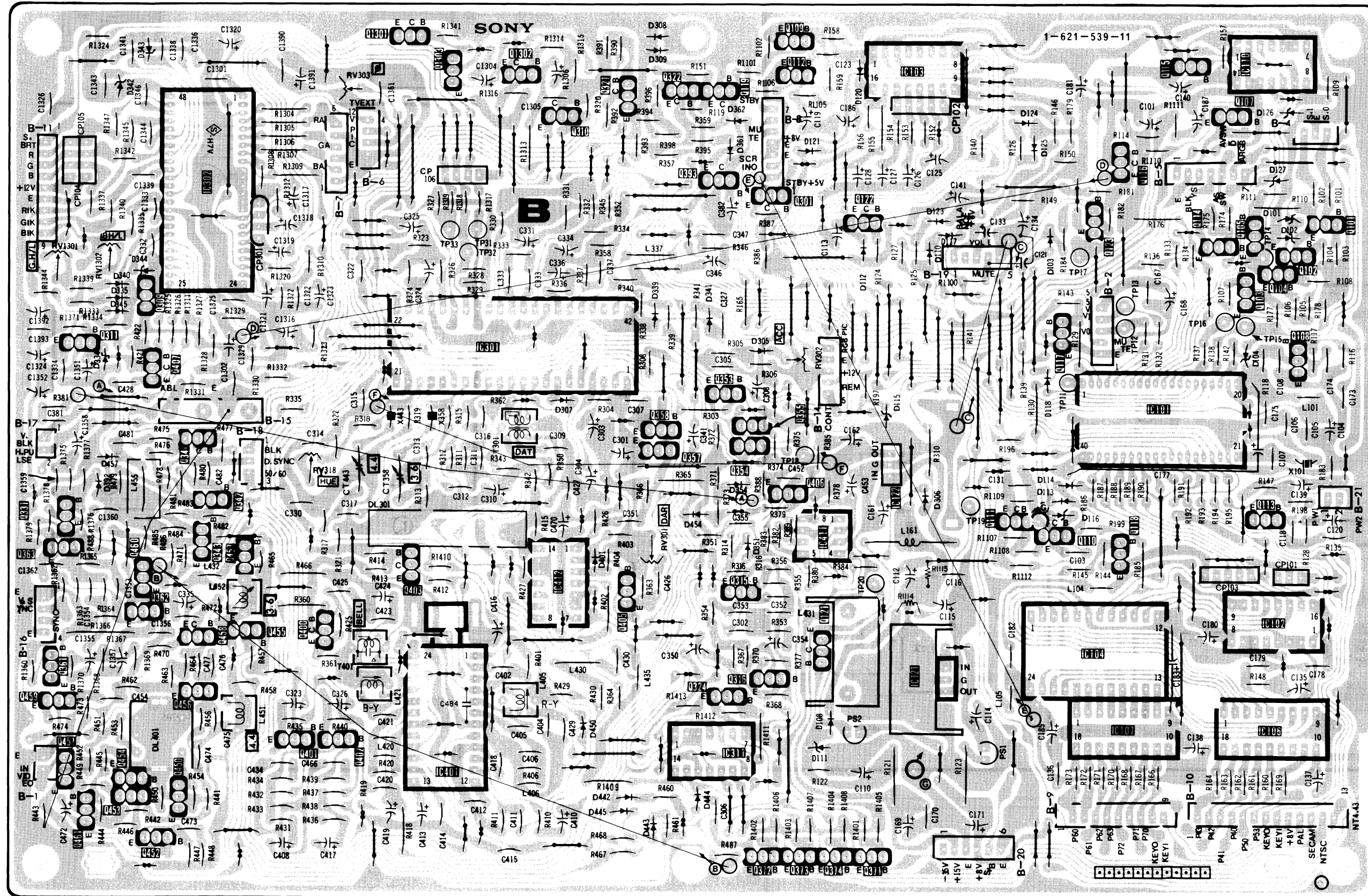
	PAL	SECAM	NTSC 3.58 4.43	PAL	SECAM	NTSC 3.58 4.43
9 Q451B				17 IC302 47		
10 IC301 2				18 IC302 42		
11 Q450B				19 IC302 37		
12 IC301 35				20 DL301 2		
13 IC301 7				21 IC301 13		
14 TP33				22 IC301 17		
15 TP32				23 IC301 9		
16 TP31				24 IC301 10		
				25 IC301 41		
				26 IC302 27		
				27 IC302 28		
				28 IC401 24		
				29 IC401 20		
				30 IC401 17		
				31 IC401 8		
				32 IC401 10		

SECAM/PAL/NTSC DFTFCT, Y/CHROMA PROCESS
AUTOMATIC WHITE BALANCE, VIDEO D/A CONVERT
REMOTO CONTROL DECODER, LAST MEMORY,
LED DRIVE.

B

B

B Board



IC	Q	D	ADJ	TP
1301	109	308		
	IC110	343		
	115	309		
1303	IC103	120		
1302	112	342		
321, 322				
119	107	362	126	RV303
310		124		
	116	361	125	
		121		
393		127		
	301			
IC302		101		
122, 123	101	123		
	105	117, 102		
	114	103		
	102	112		
		110		
	104	344		
	103	340		
		335		
309		345		
		339		
	117	341		
IC301	108	305	104	
311		334	118	
407		307		
	353	115		
	IC101			
358, 355				
357, 354				
	IC122	457	354	CT443
341	406	392	114	CT358
				RV318
	113	306		
	III	454	113	
342	111	116		
331	IC411	110		
343		351		
363, 457	118	401		
460	403			RV301
IC412				
405, 315				
362	IC102			
	400			
455	IC104			
458	121			
361	IC121			
	316			
324				
459, 456				
IC401		108		
	IC106	450		
401	IC107			
402		111		
	IC311			
451				
454				
453				
450		442, 444		
461		445, 443		
452				
372, 373				
374, 371				
IC	Q	D	ADJ	TP

[H.CENT.]

HC

[KEY BOARD INDICATOR.]

HB

[KEY BOARD INDICATOR.]

HA

HA

HB

H

9

10

11

12

13

14

15

16

17

18

19

20

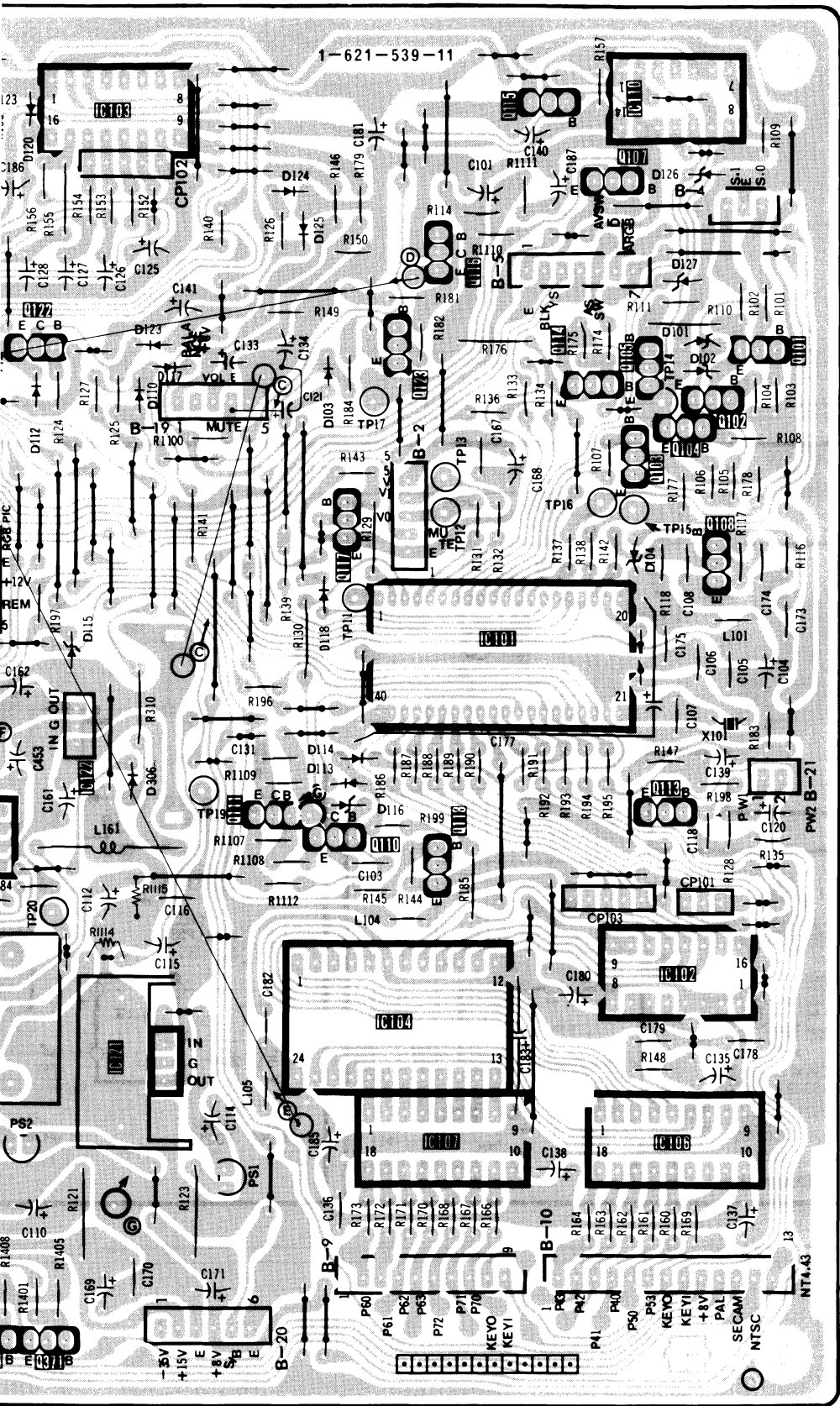
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22

23

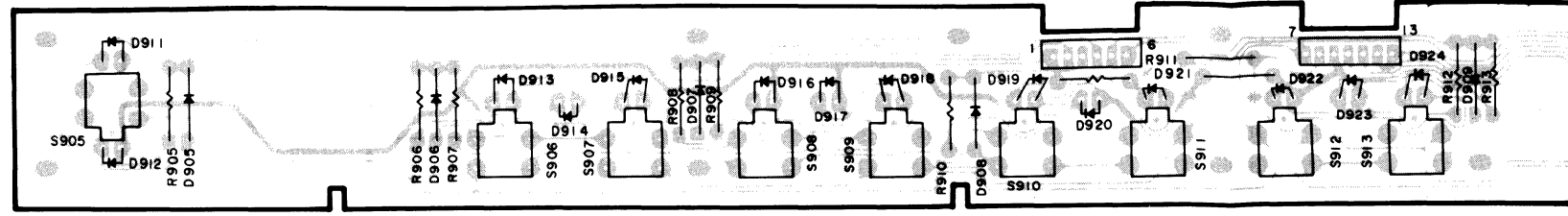
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25

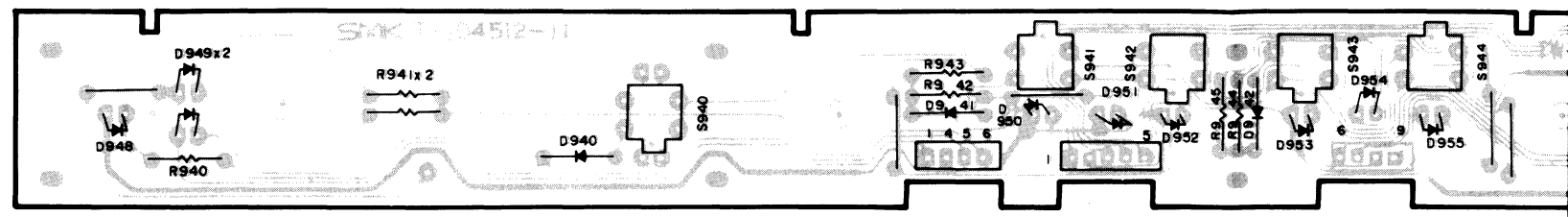


IC	Q	D	ADJ	TP
1301	109	308		
	IC110	343		
1303	115	309		
1302	112	120		
		342		
321, 322		362	RV303	
119	107	126		
310		124		
		361		
116		125		
		121		
393		127		
IC302	301	101		
122, 123	101	123	RV1301	31
105		117, 102		17
114	102	103	RV1302	14
		112		33
104		110		32
		344		
		340		
		335		
		345		
309		339		13
		341		16
117		305		15
IC301	108	104	RV302	12
311		334		
		118		11
407	353	307		
	IC101	115		
358, 355				
357, 354				
IC122	457	354	CT443	18
341	406	392	CT358	
		306	RV318	19
		454		
	113	113		
342	IC411	110		
331		118		
343		351		
363, 457		401	RV301	20
460	403			
IC412				
405, 315				
362	IC102			
400				
455	IC104			
458	121			
361	IC121			
316				
324				
459, 456				
IC401				
	IC106	450	108	
401	IC107	111		
402	IC311			
451				
454				
453				
450				
461				
452				
		442, 444		
		445, 443		
372, 373				
374, 371				
IC	Q	D	ADJ	TP

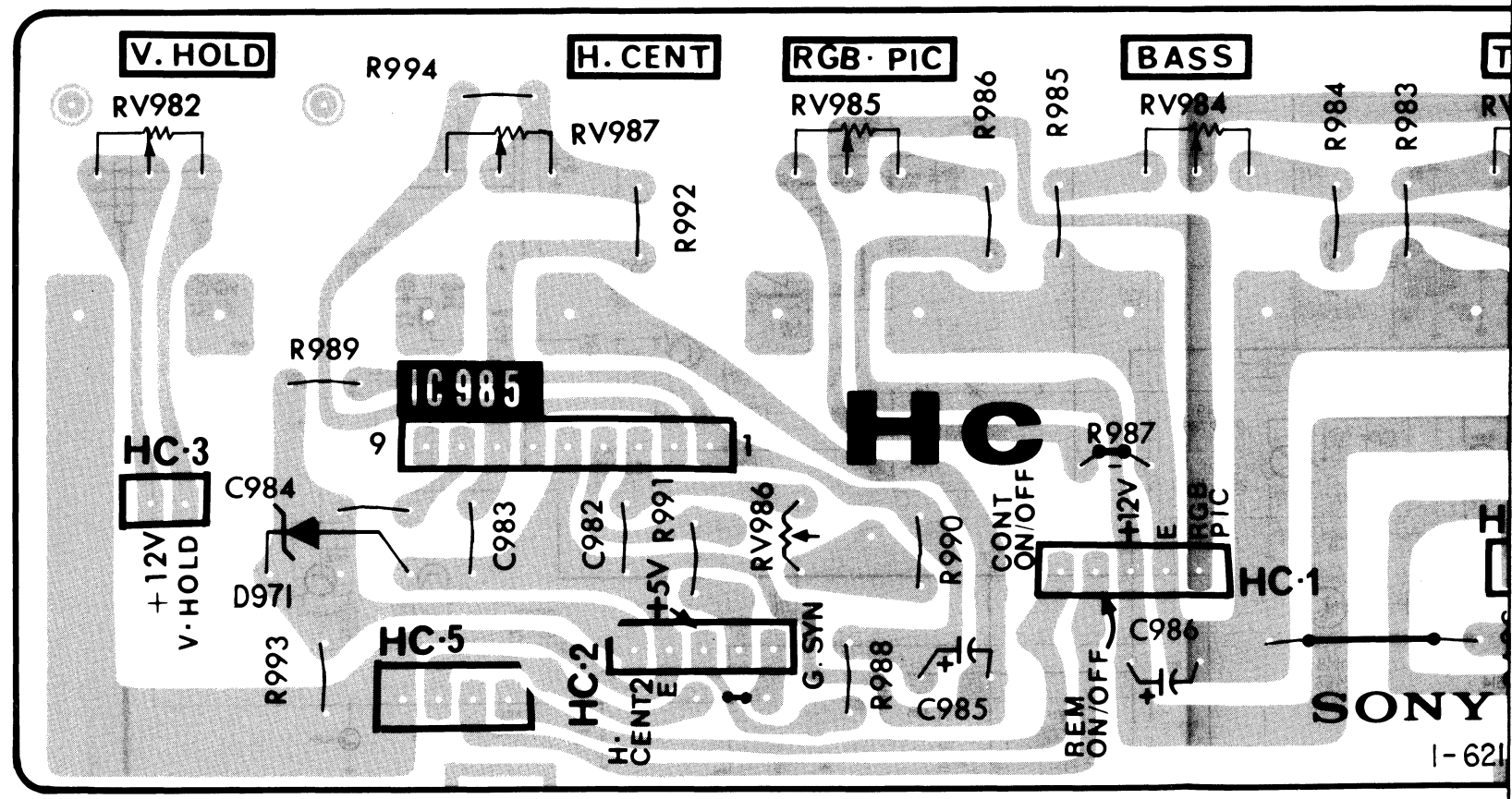
HA Board



HB Board

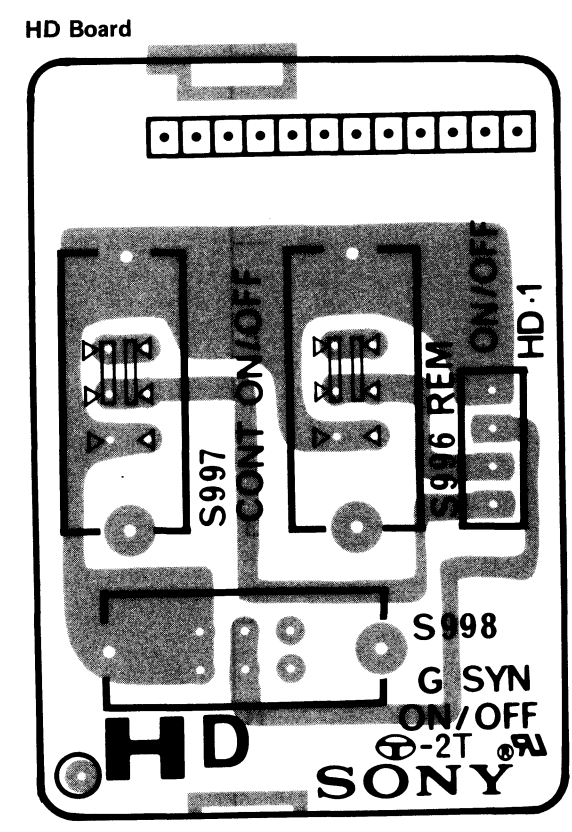
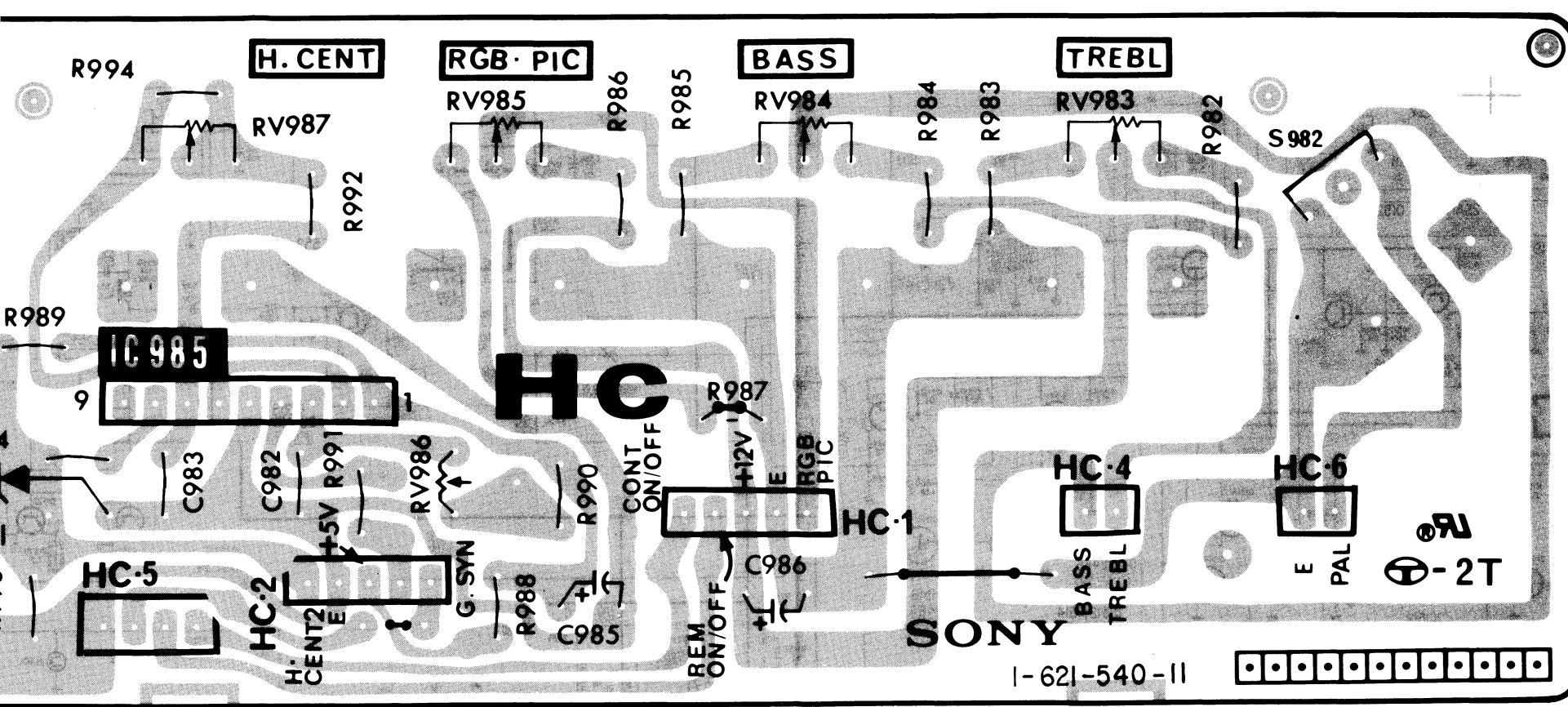
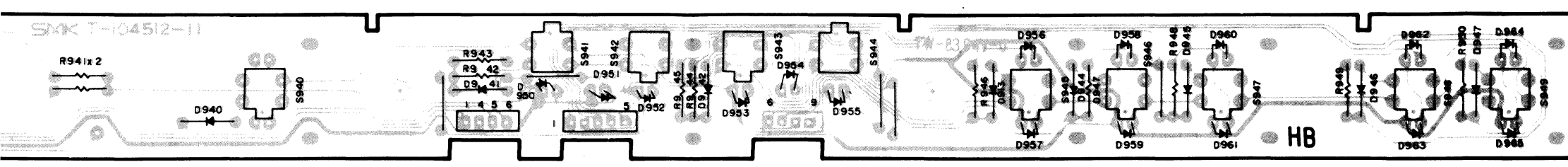
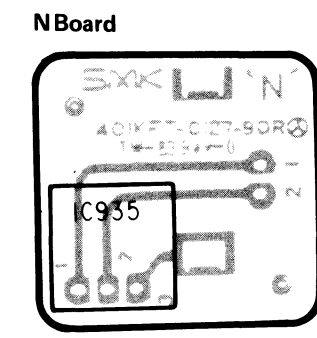
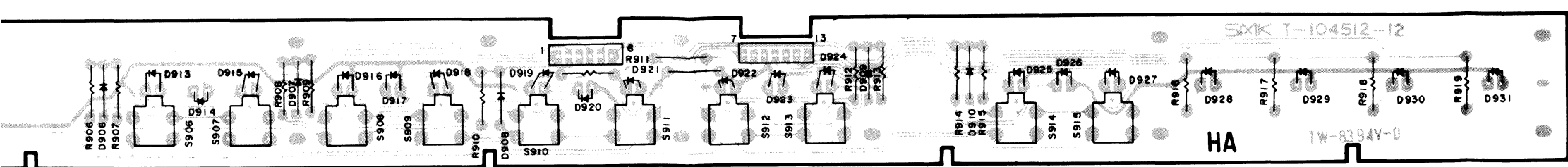


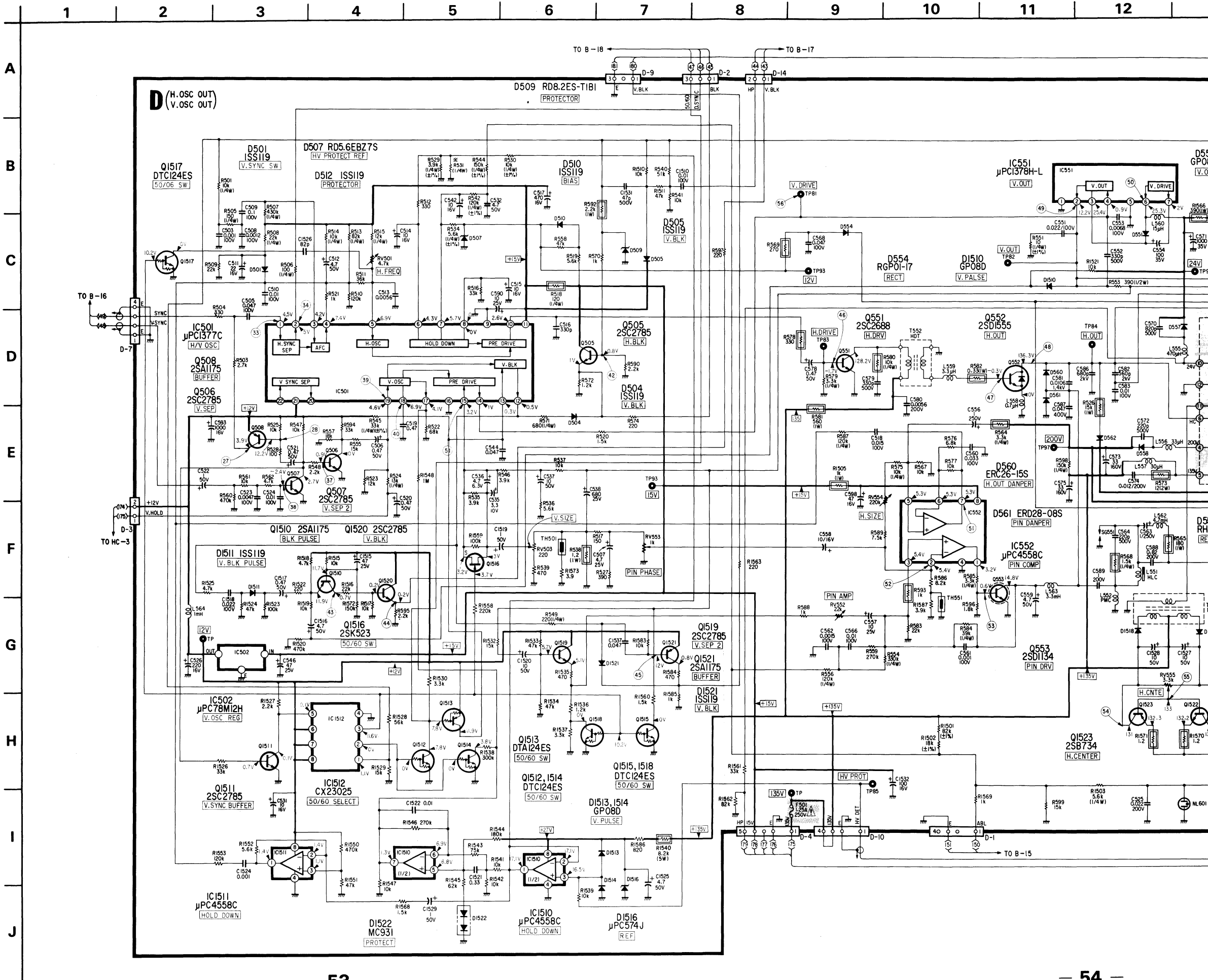
HC Board

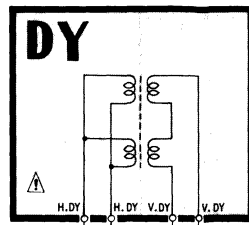


Y BOARD INDICATOR.] **HB** [KEY BOARD INDICATOR.] **HA** **HA** **HB** **HC** **HD** [SWITCH.] **N** [INF AMP.]

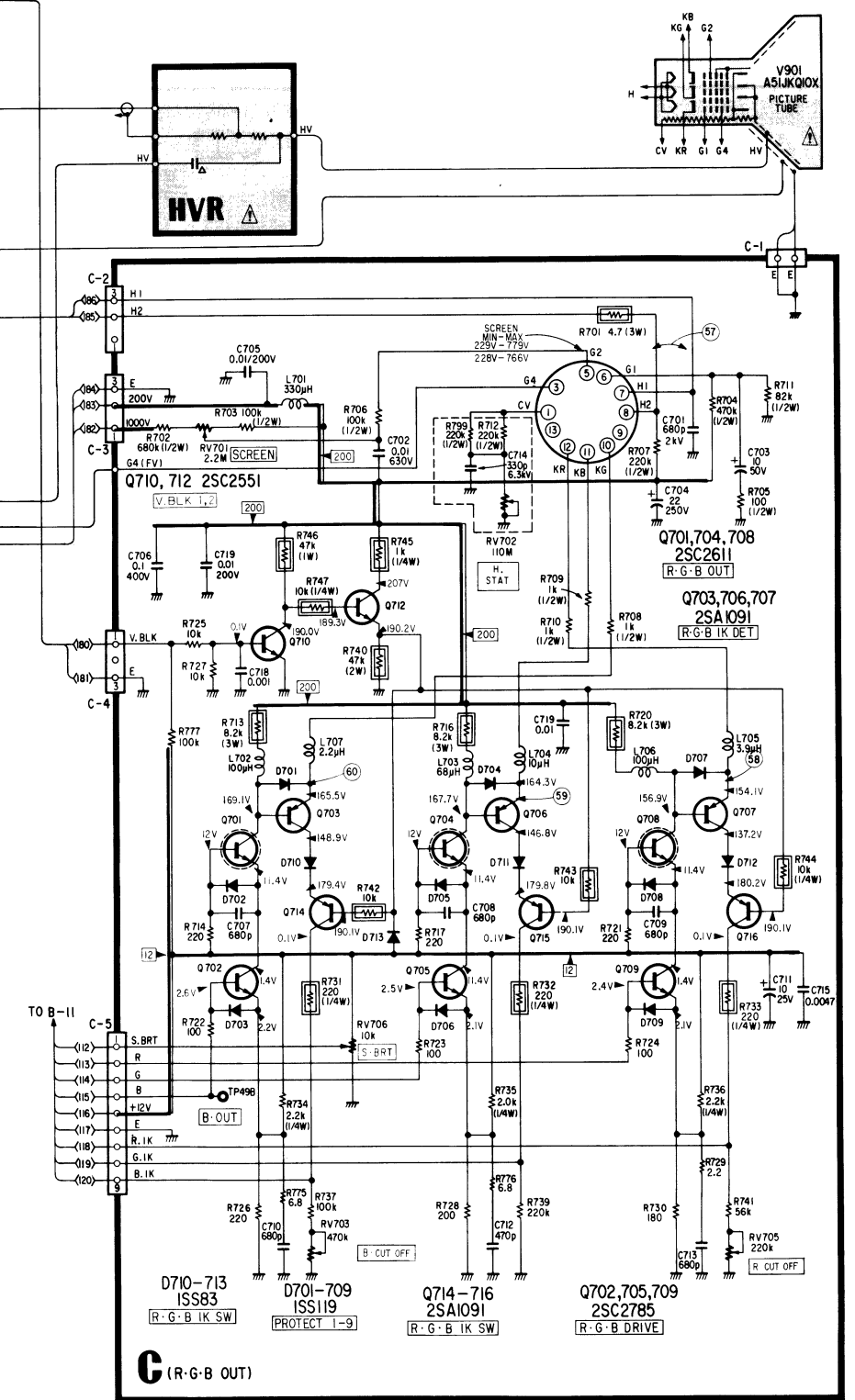
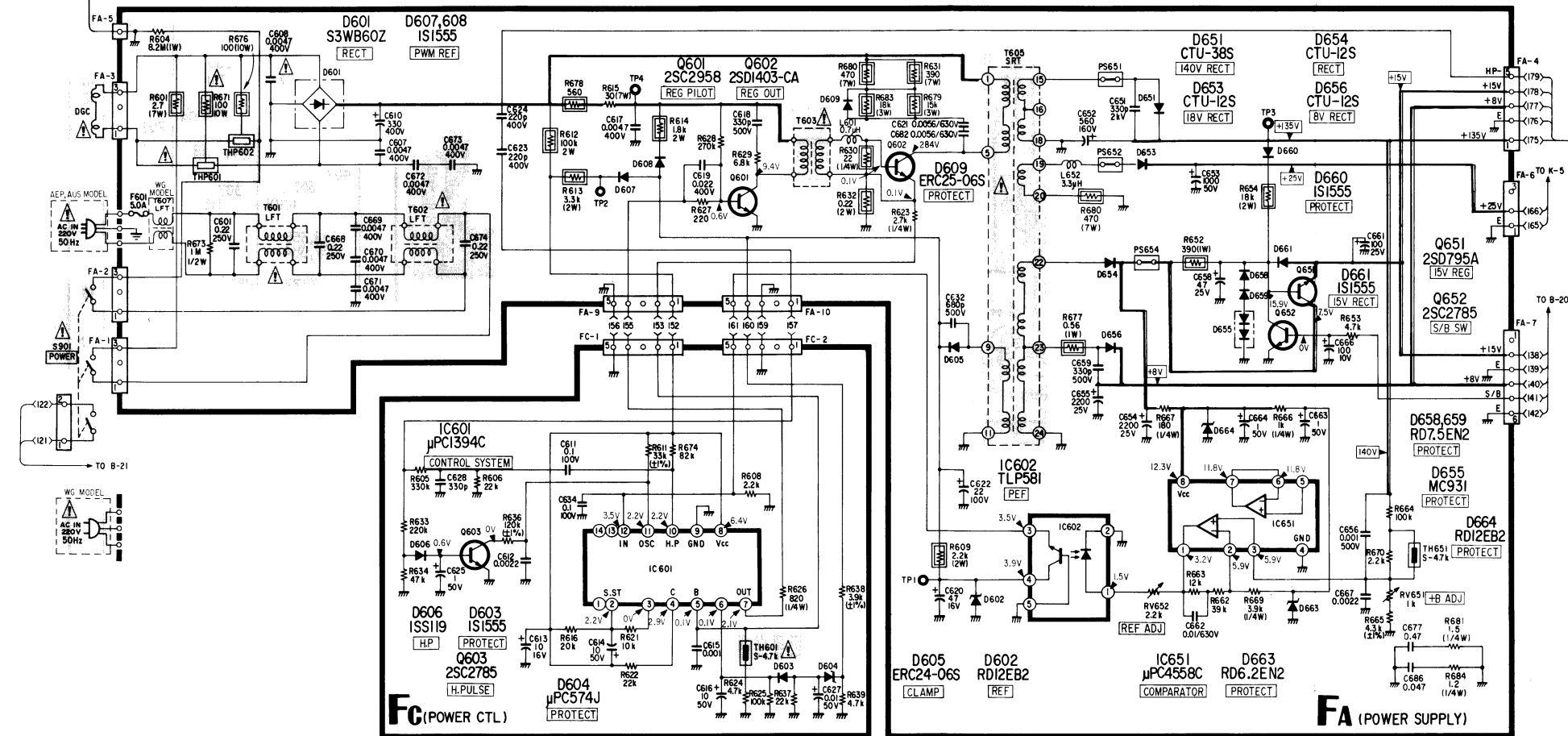
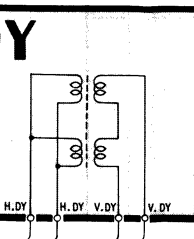
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34







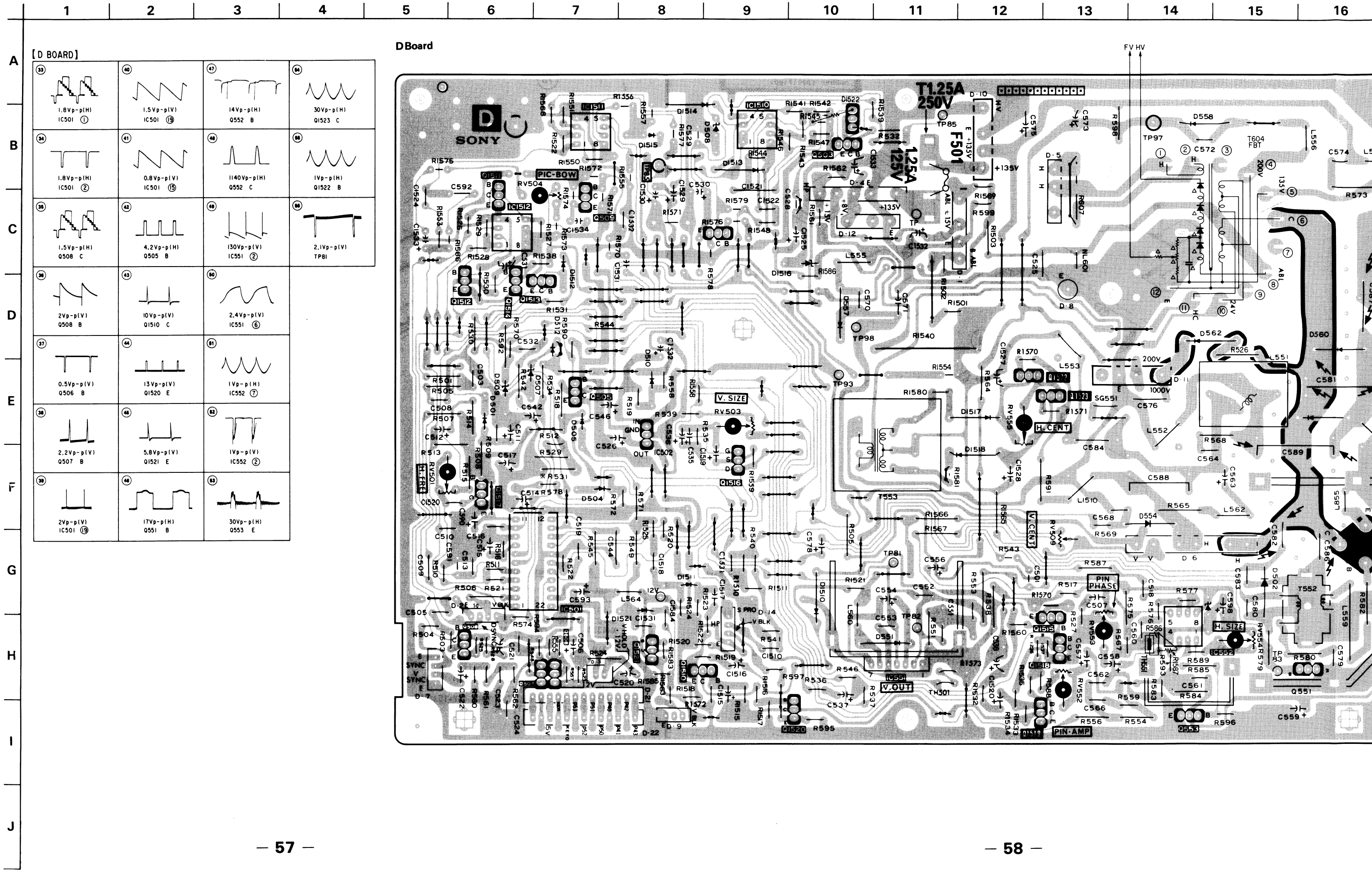
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



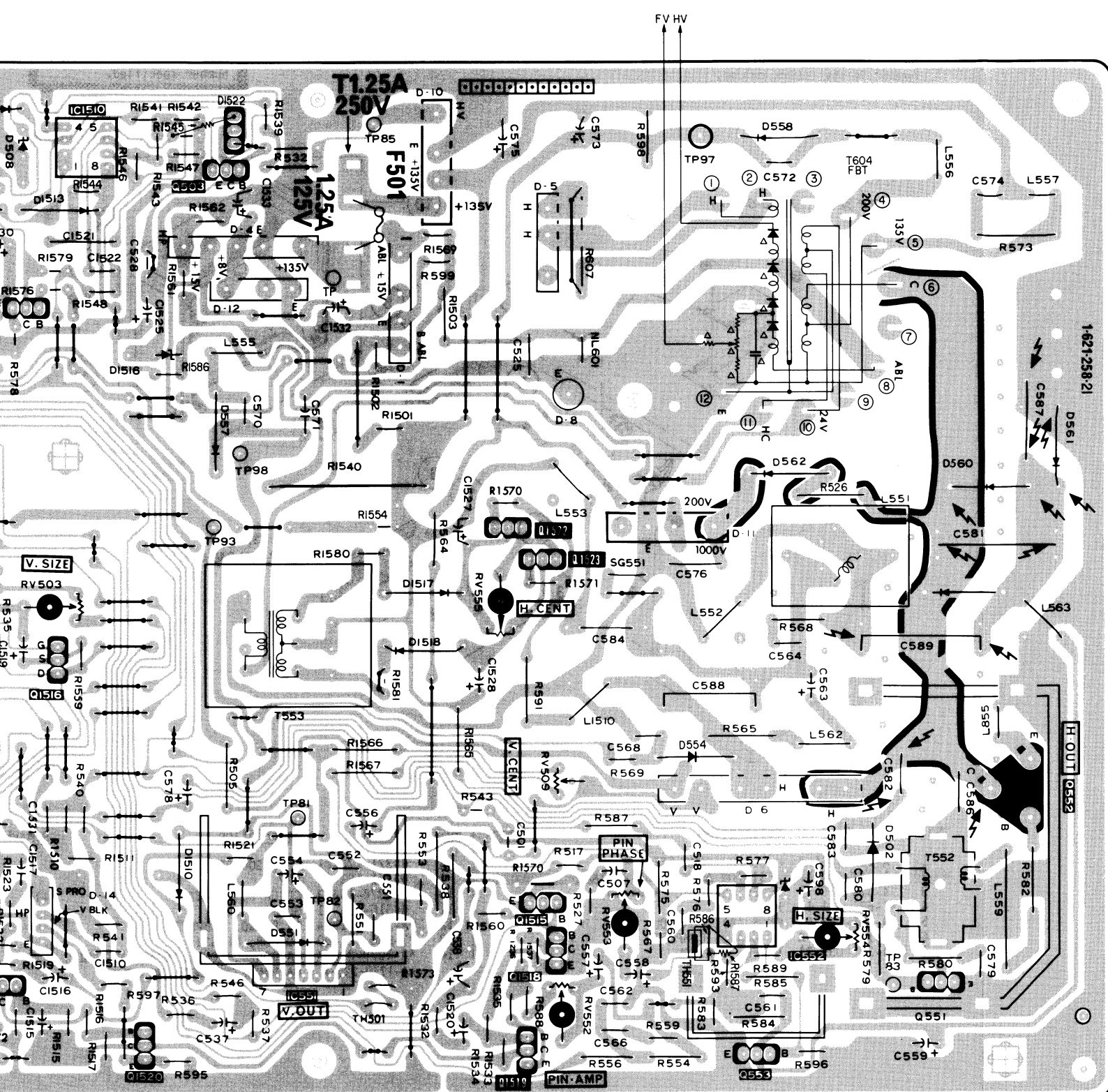
[SYNC SEP, H/V OSC, H/S OUT
PIN CONP, PIN OUT, H/V CONP, BLK.]

D

D

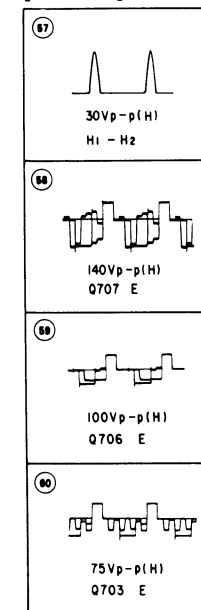


9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

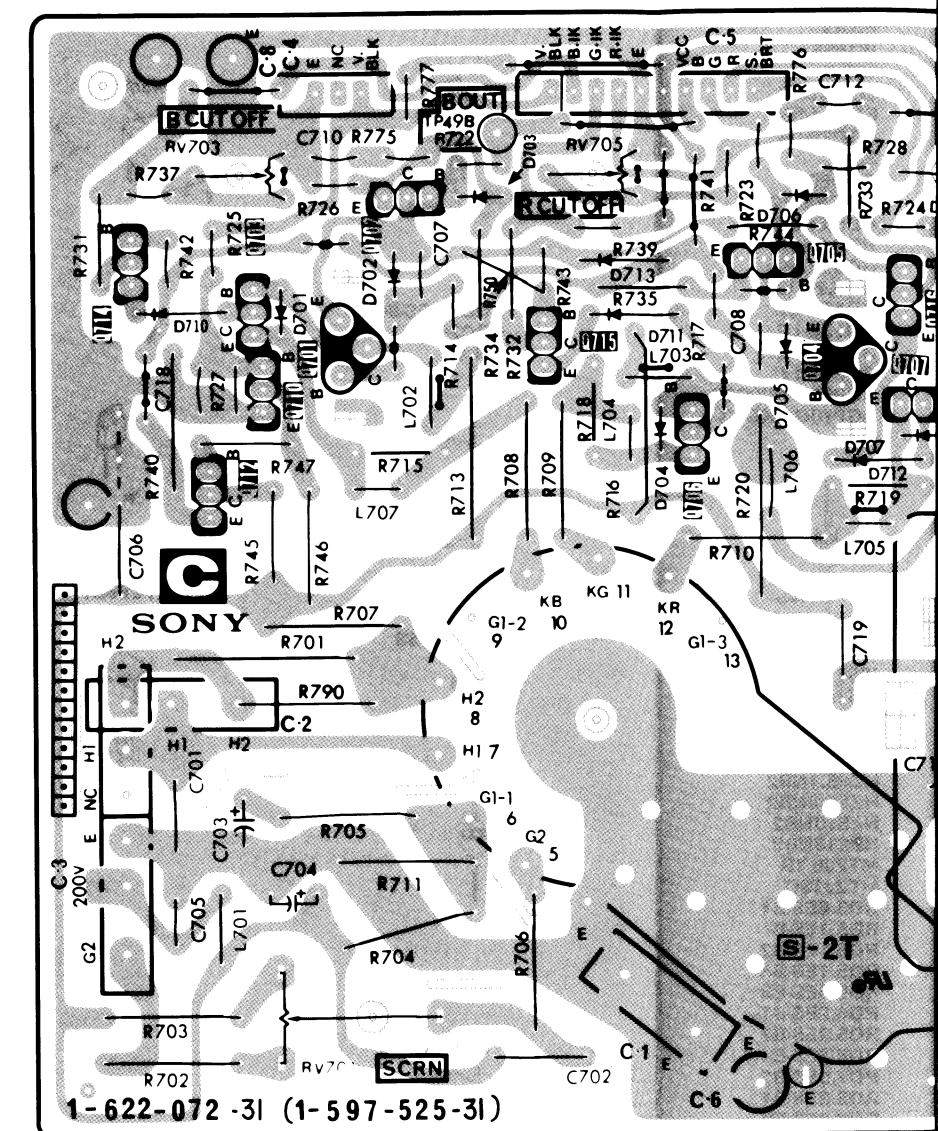


IC, Q	D	ADJ	TP
IC1510 IC1511	1522 1514 558		97
IC1511	1513		85
IC1512	1516		
IC1514 IC1512 IC1513	557 561 562 560		98
IC502	507 510 509 501 505 1518 504	RV555 RV503	93
IC1517	554	RV501	
IC501	552	RV509	81
IC552 1515 1518	502 551	RV553 RV554	82
IC551 1510 506 507	551	RV552	83
IC1519 1520	553		
IC, Q	D	ADJ	TP

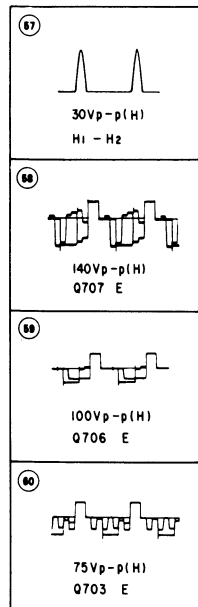
[C BOARD]



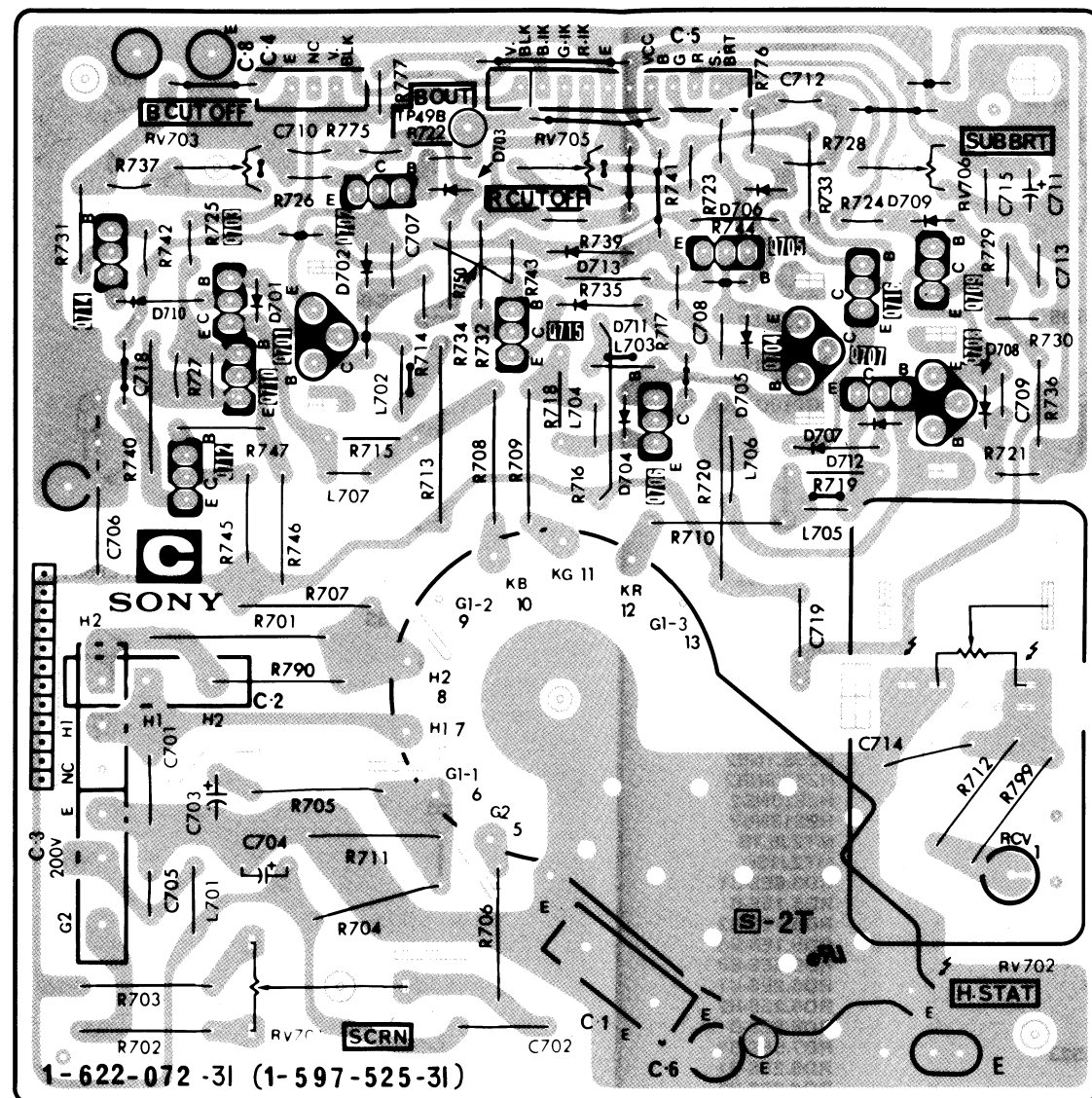
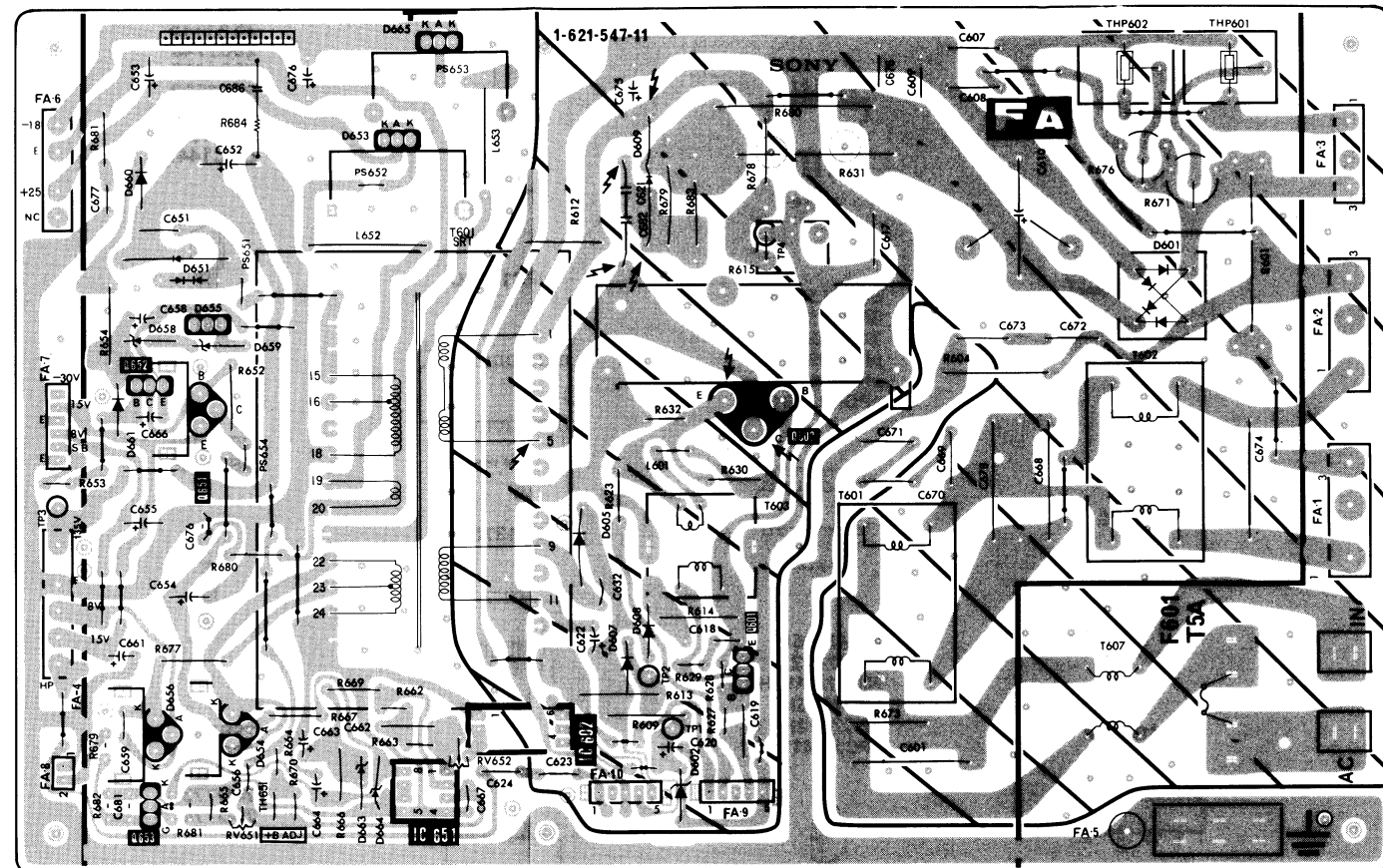
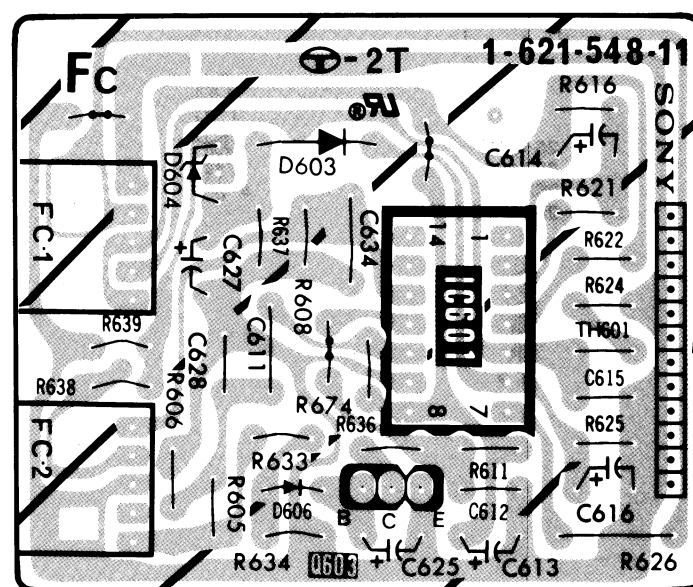
CBoard



【 C BOARD 】



C Board

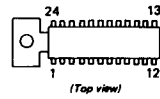
**FA Board****FC Board**

5-5. SEMICONDUCTORS

BA236
LA7910



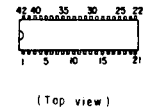
CX-175



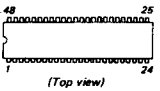
CX23025
HA17558
NJM4558D
 μ PC358C
 μ PC4558C



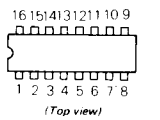
CXA1001AP



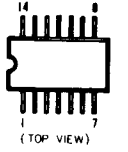
CXA1024S



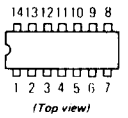
CXK1005P
SN74LS138N
TA7630P
 μ PD4052BC
 μ PD6326C



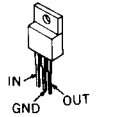
MC14073BCP



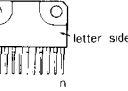
SN74LS09N
SN74LS86N
TC4073BP
 μ PD1394C
 μ PD4066BC
 μ PD4073BC



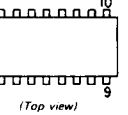
NJM7805H
NJM7812A
NJM78M12H
 μ PC7805H
 μ PC7812H
 μ PC78M121-1



TA7273P



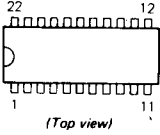
TD62381



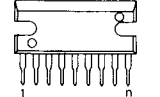
μ PC574J



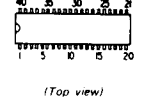
μ PC1377C



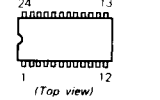
μ PC1378H



μ PD750HCU-244



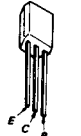
μ PD8243C



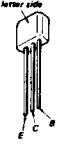
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2SA1091
2SB734
2SC2551



2SA1048
2SA1115
2SC1740
2SC2458
2SC2603
DTA124ES
DTC124ES
DTC144ES



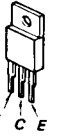
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2SC2785



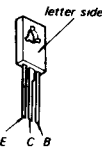
2SB734
2SC2958
2SC2959
2SD773
2SD774



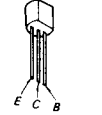
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2SD1134



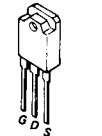
2SC2611
2SC2688



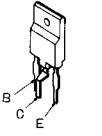
2SD795



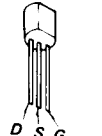
2SD1403



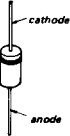
2SD1555



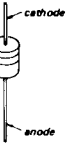
2SK523



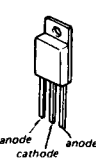
IN4148
ISS83
IS1555
10E2
EQA01-06
ERC24-06S
ERD28-08
ES1F
GP-08D
RD5.6E-B2
RD5.6EBZ7S
RD6.2E-B1
RD6.2E-B2
RD6.2E-L2
RD12E-B2
RD13E-L2
RD27E-B2
RGP01-17
RGP01-17PKG23
RGP10G-PKG23



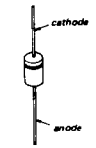
ISS119
ISS133
ISS148
HZS3.6NB1
HZS5.1NB
HZS5.1NB2
HZS6.8NB2
HZS10NB2
HZS13NB3
MTZJ5.1B
MTZJ13C
RD3.6ES-B1
RD5.1ES-B
RD5.1ES-B2
RD5.1ES-B3
RD5.6ES-B3
RD6.2ES-B1
RD6.2ES-B2
RD6.8ES-B
RD7.5ES-B2
RD8.2ES-B1
RD8.2ES-B2
RD9.1ES-B3
RD10ES-B2
RD13ES-B3



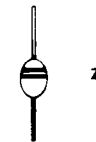
CTU-12S



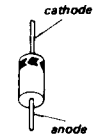
EQB9.1ES-06
ERC25-06
RH-1A



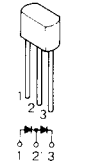
ERC26-15S
GH3F
U06G
V30N



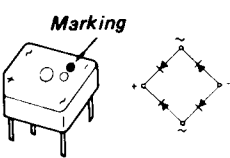
ERD29-08



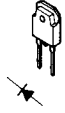
MC931



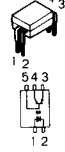
S3WB60Z



V19E
V19G



TLP581



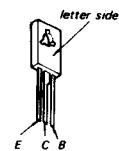
SECTION 6 EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

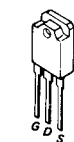
2SC2611
2SC2688



2SD795



2SD1403



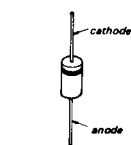
2SD1555



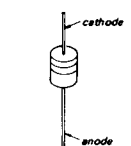
2SK523



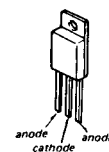
IN4148
ISS83
IS1555
10E2
EQA01-06
ERC24-06S
ERD28-08
ES1F
GP-08D
RD5.6E-B2
RD5.6EBZ7S
RD6.2E-B1
RD6.2E-B2
RD6.2E-L2
RD12E-B2
RD13E-L2
RD27E-B2
RGP01-17
RGP01-17PKG23
RGP10G-PKG23



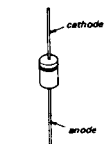
ISS119
ISS133
ISS148
HZS3.6NB1
HZS5.1NB
HZS5.1NB2
HZS6.8NB2
HZS10NB2
HZS13NB3
MTZJ5.1B
MTZJ13C
RD3.6ES-B1
RD5.1ES-B
RD5.1ES-B2
RD5.1ES-B3
RD5.6ES-B3
RD6.2ES-B1
RD6.2ES-B2
RD6.8ES-B
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RD8.2ES-B2
RD9.1ES-B3
RD10ES-B2
RD13ES-B3



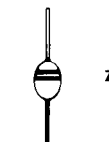
CTU-12S



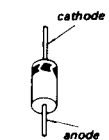
EQB9.1ES-06
ERC25-06
RH-1A



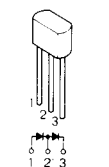
ERC26-15S
GH3F
U05G
V30N



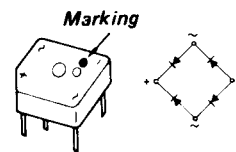
ERD29-08



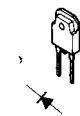
MC931



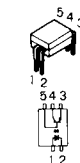
S3WB60Z



V19E
V19G

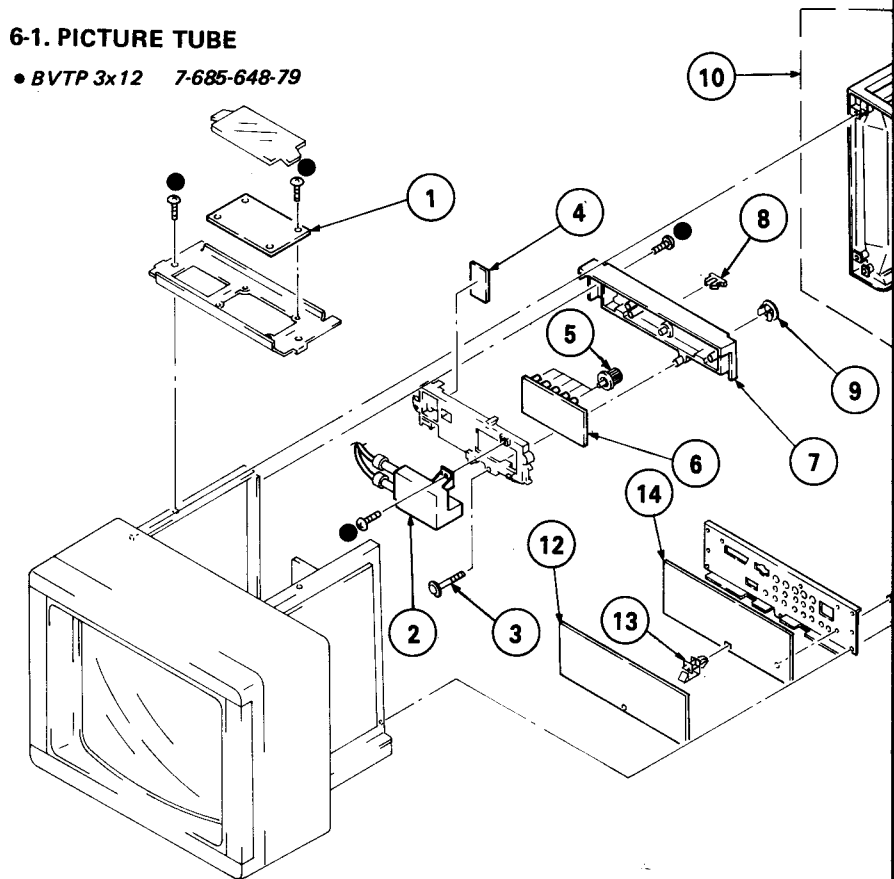


TLP581



6-1. PICTURE TUBE

• BVTP 3x12 7-685-648-79



No.	Part No.	Description	Remark	No.	Part No.	Description
1	*A-1389-865-A	K BOARD, COMPLETE		8	4-371-176-01	
2	*A-1-237-614-11	RESISTOR ASSY, HIGH-VOLTAGE		9	4-371-181-01	
3	4-319-520-11	SCREW, SPECIAL (+PW4X30)		10	X-4374-166-3	
4	*1-621-541-11	HD BOARD		11	4-316-003-21	
5	4-381-166-01	KNOB (A), CONTROL		12	*A-1270-213-A	
6	*A-1375-066-A	HC BOARD, COMPLETE		13	*3-680-721-00	
7	4-382-035-21	PANEL, CONTROL		14	*A-1270-212-A	
					*A-1270-223-A	

SECTION 6 EXPLODED VIEWS

NOTE:

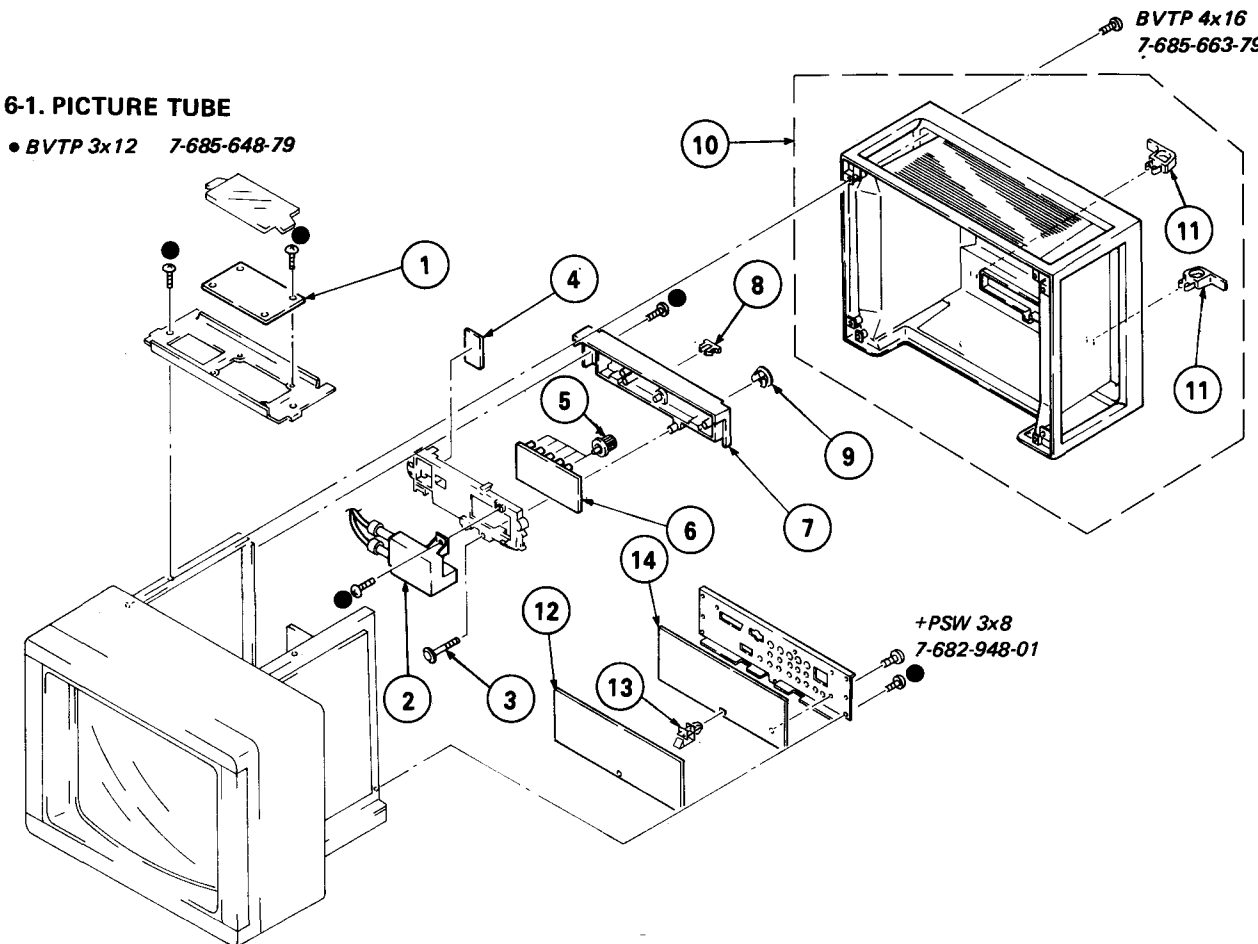
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

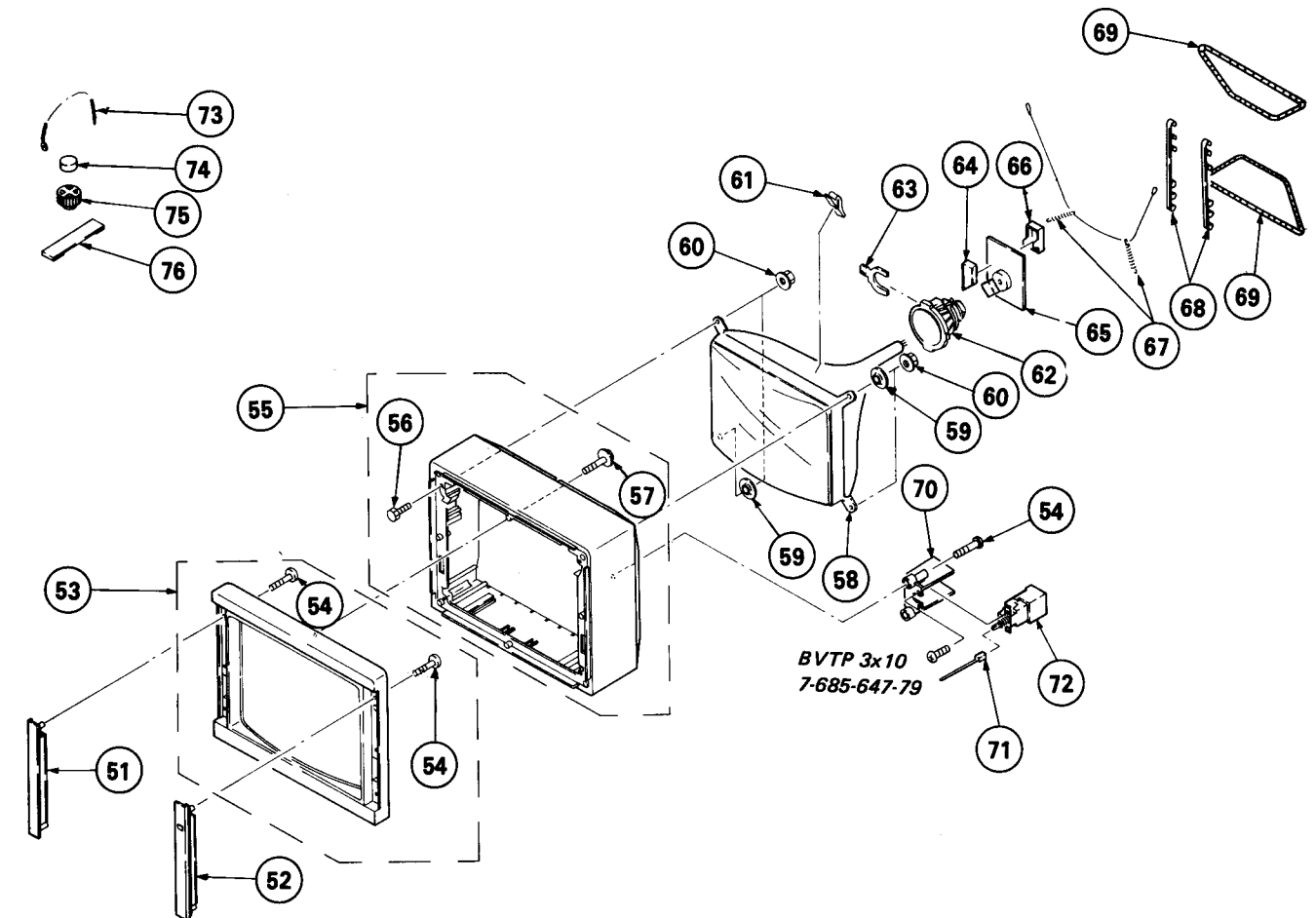
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

6-1. PICTURE TUBE

• BVTP 3x12 7-685-648-79



6-2. CHASSIS



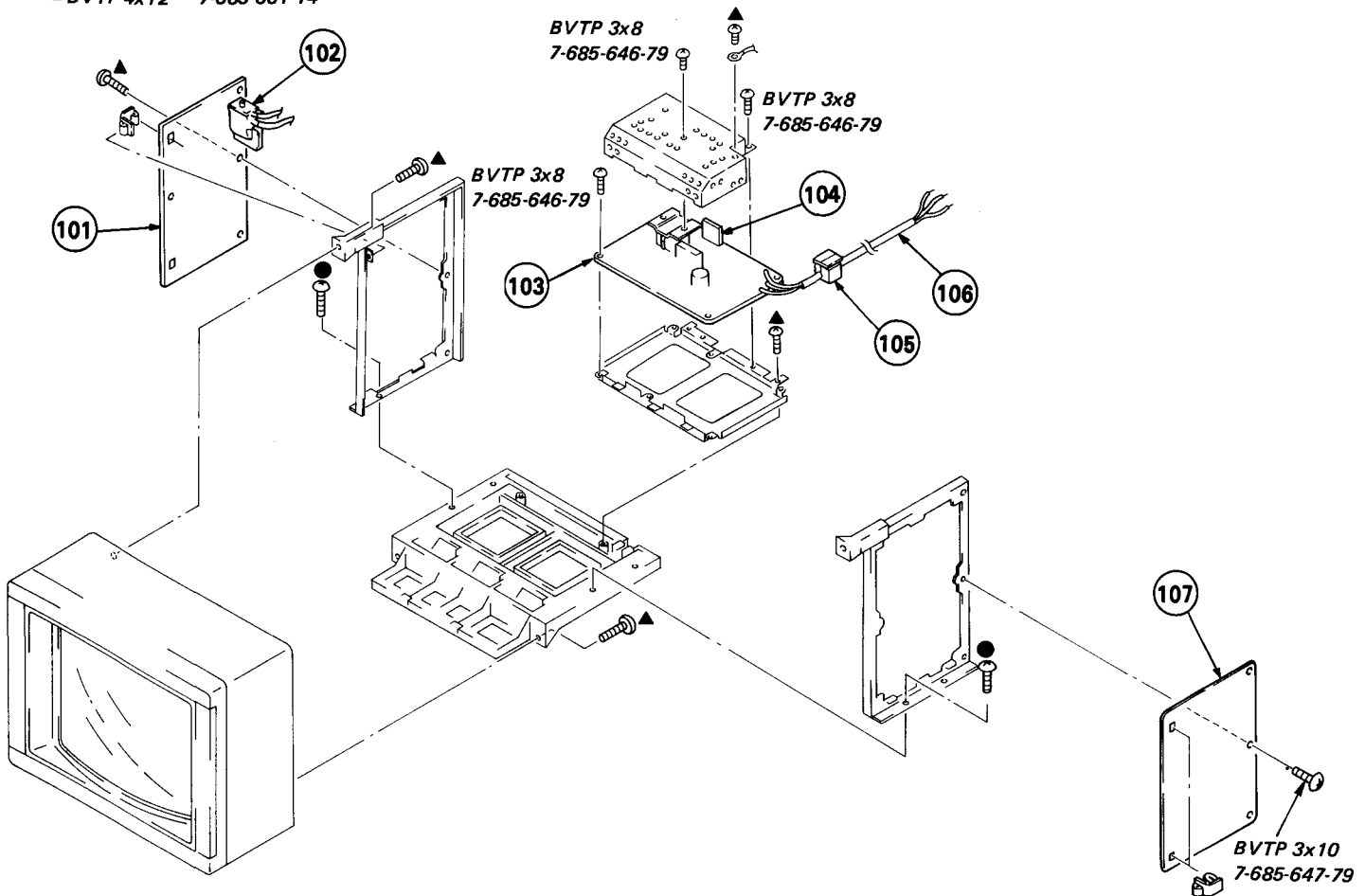
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	*A-1389-865-A	K BOARD, COMPLETE		8	4-371-176-01	CAP, SQUARE	
2	▲ 1-237-614-11	RESISTOR ASSY, HIGH-VOLTAGE		9	4-371-181-01	CAP	
3	4-319-520-11	SCREW, SPECIAL (+PW4X30)		10	X-4374-166-3	COVER ASSY, REAR	11
4	*1-621-541-11	HD BOARD		11	4-316-003-21	HOLDER, CORD	
5	4-381-166-01	KNOB (A), CONTROL		12	*A-1270-213-A	QB BOARD, COMPLETE	
6	*A-1375-066-A	HC BOARD, COMPLETE		13	*3-680-721-00	HOLDER, CHASSIS	
7	4-382-035-21	PANEL, CONTROL		14	*A-1270-212-A	QA BOARD, COMPLETE (AEP, AUS ONLY)	
					*A-1270-223-A	QA BOARD, COMPLETE (WG ONLY)	

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	1-464-803-11	KEY BOARD UNIT (A)		64	*4-379-167-01	COVER (MAIN), CV	
52	1-464-804-11	KEY BOARD UNIT (B)		65	*A-1330-801-A	C BOARD, COMPLETE	
53	X-4374-194-1	BEZEL ASSY	54	66	*4-379-160-01	COVER (REAR LID), CV	
54	3-703-083-00	+ BV 3X25		67	4-369-318-00	SPRING, TENSION	
55	X-4374-195-1	CABINET ASSY	56, 57	68	*4-369-319-00	BAND, COIL	
56	3-703-025-12	BOLT M5, HEXAGON-HEAD		69	▲ 1-426-315-11	COIL, DEMAGNETIZATION	
57	4-319-520-11	SCREW, SPECIAL (+PW4X30)		70	*4-383-128-01	COVER, MAIN SWITCH	
58	▲ 8-736-955-05	PICTURE TUBE (A51JKQ10X)		71	*4-371-182-01	SHAFT	
59	4-373-615-02	WASHER, CRT POSITIONING		72	▲ 1-554-965-12	SWITCH, PUSH (AC POWER) (1 KEY)	
60	4-306-034-00	FLANGE NUT, (B) 5MM		73	4-308-870-00	CLIP, LEAD WIRE	
61	3-703-003-00	SPACER, DY		74	1-452-032-00	MAGNET, DISK; 10MM Ø	
62	▲ 1-451-295-11	DEFLECTION YOKE (SY-153E)		75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
63	1-452-277-00	MAGNET, BMC		76	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	

6-3. BACK COVER

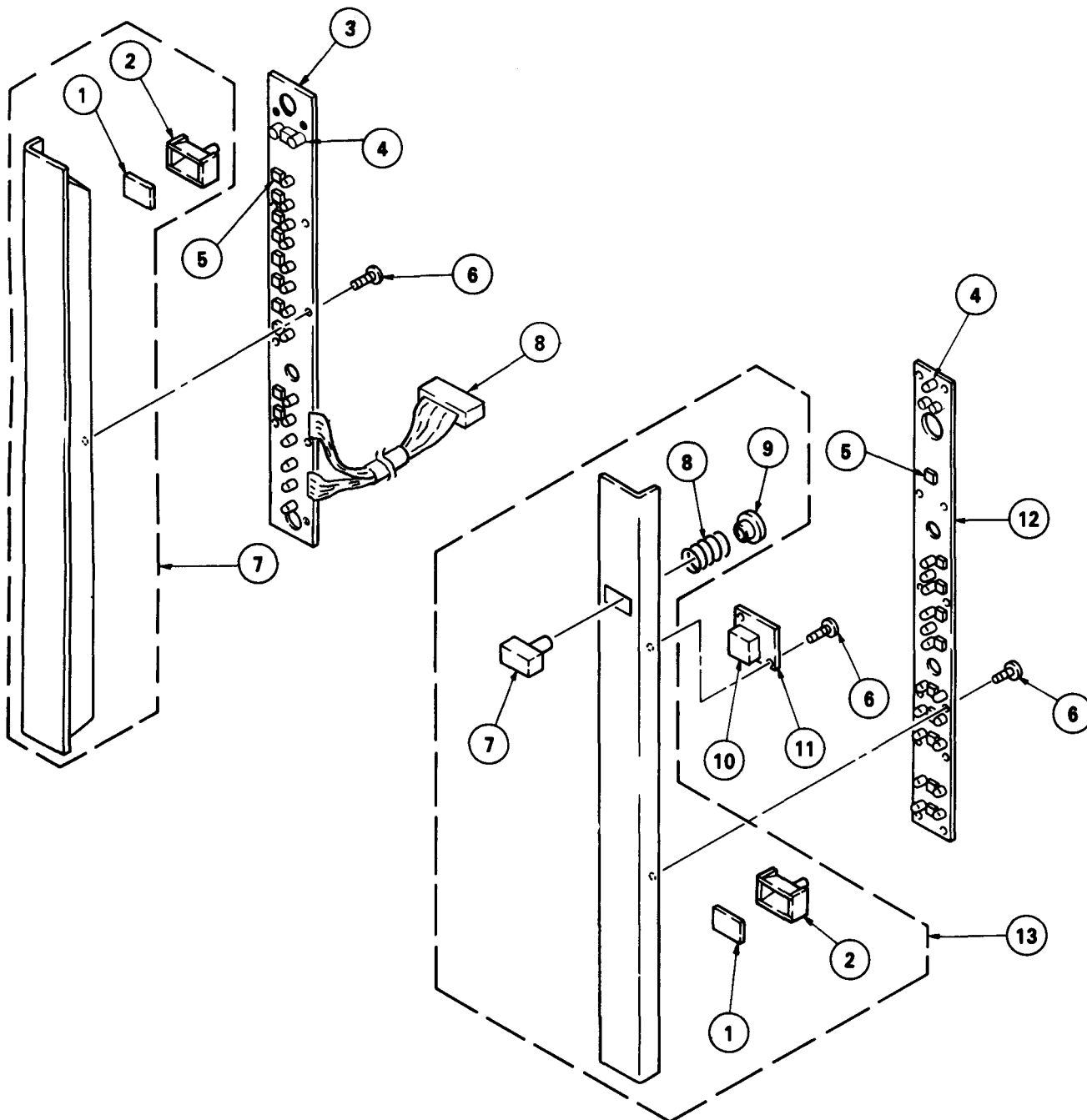
- BVTP 3x12 7-685-648-79
- ▲ BVTP 4x12 7-685-661-14



The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
101	*A-1345-708-A	D BOARD, COMPLETE		105	▲*4-364-726-01	BUSHING, AC CORD	
102	▲1-439-372-32	TRANSFORMER ASSY, FLYBACK		106	▲1-534-820-13	POWER CORD (AEP, AUS ONLY)	
103	*A-1245-395-A	FA BOARD, COMPLETE (AEP, AUS ONLY)	104	▲1-559-409-11	POWER CORD (WG ONLY)		
	*A-1245-414-A	FA BOARD, COMPLETE (WG ONLY)	104				
104	*1-621-548-11	FC BOARD		107	*A-1135-448-A	B BOARD, COMPLETE	

6-4. KEY BOARD UNIT



No.	Part No.	Description
1	9-990-892-01	ILLUMINATOR A
2	9-990-891-01	REFLECTOR A
3	*9-992-308-01	HA BOARD
4	9-990-895-01	SPACER
5	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)
6	9-990-894-01	TAPPING SCREW
7	9-992-310-01	FRAME ASSY
8	9-992-309-01	HARNESS

Remark

1,2

No.	Part No.	Description
1	9-990-892-01	ILLUMINATOR A
2	9-990-891-01	REFLECTOR A
4	9-990-895-01	SPACER
5	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)
6	9-990-894-01	TAPPING SCREW
7	9-990-899-01	KEY TOP
8	9-990-902-01	COIL SPRING
9	9-990-900-01	STOPPER
10	8-741-138-70	DETECTOR (BX1387)
11	*9-990-898-01	N BOARD
12	*9-992-401-01	HB BOARD
13	9-992-402-01	FRAME ASSY

Remark

1,2,7,8,9

SECTION 7

ELECTRICAL PARTS LIST

B

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS

- MF : μ F, PF : μ μF

RESISTORS

- All resistors are in ohms
- F : nonflammable

COILS

- MMH : mH, UH : μ H

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	*A-1135-448-A	B BOARD, COMPLETE *****		C138	1-123-307-00	ELECT 100MF	20% 10V
		CONNECTOR		C139	1-123-356-00	ELECT 10MF	20% 16V
B1	*1-566-054-11	PIN, CONNECTOR 2P		C140	1-123-356-00	ELECT 10MF	20% 16V
B2	*1-566-057-11	PIN, CONNECTOR 5P		C141	1-123-330-00	ELECT 22MF	20% 16V
B4	*1-566-055-11	PIN, CONNECTOR 3P		C161	1-123-333-00	ELECT 100MF	20% 25V
B5	*1-566-059-11	PIN, CONNECTOR 7P					
B6	*1-566-056-11	PIN, CONNECTOR 4P		C162	1-123-321-00	ELECT 220MF	20% 16V
				C167	1-101-004-00	CERAMIC 0.01MF	50V
B7	*1-566-058-11	PIN, CONNECTOR 6P		C168	1-123-356-00	ELECT 10MF	20% 16V
B8	*1-566-059-11	PIN, CONNECTOR 7P		C169	1-123-356-00	ELECT 10MF	20% 25V
B9	*1-566-061-11	PIN, CONNECTOR 9P		C170	1-101-004-00	CERAMIC 0.01MF	50V
B10	*1-566-065-11	PIN, CONNECTOR 13P					
B11	*1-566-061-11	PIN, CONNECTOR 9P		C171	1-123-356-00	ELECT 10MF	20% 16V
				C173	1-101-004-00	CERAMIC 0.01MF	50V
B13	*1-566-054-11	PIN, CONNECTOR 2P		C174	1-101-004-00	CERAMIC 0.01MF	50V
B14	*1-566-057-11	PIN, CONNECTOR 5P		C175	1-101-006-00	CERAMIC 0.047MF	50V
B15	*1-508-766-00	4P PLUG (M)		C177	1-119-354-00	ELECT 330MF	10V
B16	*1-566-056-11	PIN, CONNECTOR 4P					
B17	*1-566-054-11	PIN, CONNECTOR 2P		C178	1-101-004-00	CERAMIC 0.01MF	50V
				C179	1-101-006-00	CERAMIC 0.047MF	50V
B18	*1-566-055-11	PIN, CONNECTOR 3P		C180	1-123-307-00	ELECT 100MF	20% 10V
B19	*1-566-057-11	PIN, CONNECTOR 5P		C181	1-123-332-00	ELECT 47MF	20% 16V
B20	*1-566-058-11	PIN, CONNECTOR 6P		C182	1-101-006-00	CERAMIC 0.047MF	50V
B21	*1-566-054-11	PIN, CONNECTOR 2P					
		CAPACITOR		C183	1-119-352-00	ELECT 100MF	10V
C101	1-123-356-00	ELECT 10MF	20% 16V	C185	1-123-307-00	ELECT 100MF	20% 10V
C103	1-102-973-00	CERAMIC 100PF	5% 50V	C186	1-123-356-00	ELECT 10MF	20% 16V
C104	1-123-306-00	ELECT 47MF	20% 10V	C187	1-123-330-00	ELECT 22MF	20% 16V
C105	1-136-161-00	FILM 0.047MF	5% 50V	C301	1-123-333-00	ELECT 100MF	20% 16V
C106	1-102-963-00	CERAMIC 33PF	5% 50V				
				C302	1-101-888-00	CERAMIC 68PF	5% 50V
C107	1-102-963-00	CERAMIC 33PF	5% 50V	C303	1-123-369-00	ELECT 4.7MF	20% 25V
C108	1-102-978-00	CERAMIC 220PF	5% 50V	C304	1-123-356-00	ELECT 10MF	20% 16V
C110	1-123-333-00	ELECT 100MF	20% 25V	C305	1-110-201-00	MYLAR 0.0033MF	5% 50V
C112	1-123-335-00	ELECT 330MF	20% 25V	C306	1-101-006-00	CERAMIC 0.047MF	50V
C113	1-123-318-00	ELECT 33MF	20% 16V				
				C307	1-101-006-00	CERAMIC 0.047MF	50V
C114	1-123-333-00	ELECT 100MF	20% 25V	C308	1-123-381-00	ELECT 2.2MF	20% 50V
C115	1-123-333-00	ELECT 100MF	20% 16V	C309	1-102-946-00	CERAMIC 9PF	0.5PF 50V
C116	1-101-006-00	CERAMIC 0.047MF	50V	C310	1-123-356-00	ELECT 10MF	20% 16V
C118	1-101-004-00	CERAMIC 0.01MF	50V	C311	1-136-157-00	FILM 0.022MF	5% 50V
C119	1-123-330-00	ELECT 22MF	20% 16V				
				C312	1-136-157-00	FILM 0.022MF	5% 50V
C120	1-123-330-00	ELECT 22MF	20% 25V	C313	1-102-074-00	CERAMIC 0.001MF	10% 50V
C121	1-123-356-00	ELECT 10MF	20% 16V	C314	1-101-006-00	CERAMIC 0.047MF	50V
C123	1-101-006-00	CERAMIC 0.047MF	50V	C315	1-101-006-00	CERAMIC 0.047MF	50V
C125	1-123-380-00	ELECT 1MF	20% 50V	C316	1-136-169-00	FILM 0.22MF	5% 50V
C126	1-123-380-00	ELECT 1MF	20% 50V				
				C317	1-102-074-00	CERAMIC 0.001MF	10% 50V
C127	1-123-380-00	ELECT 1MF	20% 50V	C322	1-101-006-00	CERAMIC 0.047MF	50V
C128	1-123-380-00	ELECT 1MF	20% 50V	C323	1-124-464-11	ELECT 0.22MF	20% 50V
C131	1-130-475-00	MYLAR 0.0022MF	5% 50V	C324	1-124-464-11	ELECT 0.22MF	20% 50V
C133	1-123-380-00	ELECT 1MF	20% 50V	C325	1-123-333-00	ELECT 100MF	20% 16V
C134	1-123-380-00	ELECT 1MF	20% 50V				
				C326	1-124-464-11	ELECT 0.22MF	20% 50V
C135	1-123-381-00	ELECT 2.2MF	20% 50V	C327	1-102-111-00	CERAMIC 270PF	10% 50V
C136	1-101-006-00	CERAMIC 0.047MF	50V	C330	1-101-006-00	CERAMIC 0.047MF	50V
C137	1-123-307-00	ELECT 100MF	20% 10V	C331	1-123-380-00	ELECT 1MF	20% 50V
				C332	1-136-161-00	FILM 0.047MF	5% 50V
				C333	1-102-959-00	CERAMIC 22PF	5% 50V
				C334	1-123-380-00	ELECT 1MF	20% 50V
				C335	1-123-307-00	ELECT 100MF	20% 10V

B

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C336	1-123-318-00	ELECT	33MF 20% 16V	C1302	1-124-656-00	ELECT	2.2MF 20% 50V
C337	1-102-112-00	CERAMIC	330PF 10% 50V	C1304	1-123-356-00	ELECT	10MF 20% 16V
C341	1-123-380-00	ELECT	1MF 20% 50V	C1305	1-136-161-00	FILM	0.047MF 5% 50V
C346	1-123-380-00	ELECT	1MF 20% 50V	C1306	1-123-380-00	ELECT	1MF 20% 50V
C347	1-102-111-00	CERAMIC	270PF 10% 50V	C1316	1-123-356-00	ELECT	10MF 20% 25V
C350	1-123-356-00	ELECT	10MF 20% 16V	C1317	1-123-380-00	ELECT	1MF 20% 50V
C351	1-102-074-00	CERAMIC	0.001MF 10% 50V	C1318	1-123-380-00	ELECT	1MF 20% 50V
C352	1-101-361-00	CERAMIC	150PF 5% 50V	C1319	1-123-380-00	ELECT	1MF 20% 50V
C353	1-102-959-00	CERAMIC	22PF 5% 50V	C1320	1-123-382-00	ELECT	3.3MF 20% 50V
C354	1-123-380-00	ELECT	1MF 20% 50V	C1321	1-123-356-00	ELECT	10MF 20% 25V
C355	1-101-005-00	CERAMIC	0.022MF 50V	C1322	1-101-004-00	CERAMIC	0.01MF 50V
C381	1-102-074-00	CERAMIC	0.001MF 10% 50V	C1323	1-123-356-00	ELECT	10MF 20% 25V
C382	1-123-332-00	ELECT	47MF 20% 16V	C1324	1-123-332-00	ELECT	47MF 20% 16V
C402	1-136-167-00	FILM	0.15MF 5% 50V	C1325	1-101-006-00	CERAMIC	0.047MF 50V
C404	1-136-165-00	FILM	0.1MF 5% 50V	C1326	1-101-006-00	CERAMIC	0.047MF 50V
C405	1-102-806-00	CERAMIC	27PF 5% 50V	C1329	1-123-318-00	ELECT	33MF 20% 16V
C406	1-101-890-00	CERAMIC	75PF 5% 50V	C1333	1-136-153-00	FILM	0.01MF 5% 50V
C408	1-123-356-00	ELECT	10MF 20% 16V	C1334	1-101-004-00	CERAMIC	0.01MF 50V
C410	1-123-356-00	ELECT	10MF 20% 50V	C1336	1-110-203-00	MYLAR	0.0047MF 5% 50V
C411	1-136-161-00	FILM	0.047MF 5% 50V	C1338	1-136-161-00	FILM	0.047MF 5% 50V
C412	1-102-119-00	CERAMIC	0.0015MF 10% 50V	C1339	1-136-153-00	FILM	0.01MF 5% 50V
C413	1-123-380-00	ELECT	1MF 20% 50V	C1341	1-110-203-00	MYLAR	0.0047MF 5% 50V
C414	1-136-173-00	FILM	0.47MF 5% 50V	C1343	1-136-161-00	FILM	0.047MF 5% 50V
C415	1-101-005-00	CERAMIC	0.022MF 50V	C1344	1-136-153-00	FILM	0.01MF 5% 50V
C416	1-123-356-00	ELECT	10MF 20% 16V	C1346	1-110-203-00	MYLAR	0.0047MF 5% 50V
C417	1-123-356-00	ELECT	10MF 20% 16V	C1351	1-123-356-00	ELECT	10MF 20% 25V
C418	1-136-161-00	FILM	0.047MF 5% 50V	C1352	1-123-332-00	ELECT	47MF 20% 16V
C419	1-123-380-00	ELECT	1MF 20% 50V	C1353	1-102-973-00	CERAMIC	100PF 5% 50V
C420	1-101-890-00	CERAMIC	75PF 5% 50V	C1354	1-136-157-00	FILM	0.022MF 5% 50V
C421	1-102-806-00	CERAMIC	27PF 5% 50V	C1355	1-123-380-00	ELECT	1MF 20% 50V
C423	1-136-165-00	FILM	0.1MF 5% 50V	C1356	1-136-165-00	FILM	0.1MF 5% 50V
C424	1-123-356-00	ELECT	10MF 20% 16V	C1357	1-123-380-00	ELECT	1MF 20% 50V
C425	1-102-888-00	CERAMIC	150PF 5% 50V	C1358	1-123-369-00	ELECT	4.7MF 20% 50V
C426	1-101-004-00	CERAMIC	0.01MF 50V	C1359	1-102-820-00	CERAMIC	330PF 5% 50V
C427	1-101-006-00	CERAMIC	0.047MF 50V	C1360	1-102-820-00	CERAMIC	330PF 5% 50V
C428	1-102-121-00	CERAMIC	0.0022MF 10% 50V	C1361	1-102-129-00	CERAMIC	0.01MF 10% 50V
C429	1-136-161-00	FILM	0.047MF 5% 50V	C1362	1-130-475-00	MYLAR	0.0022MF 5% 50V
C430	1-102-971-00	CERAMIC	82PF 5% 50V	C1390	1-101-004-00	CERAMIC	0.01MF 50V
C434	1-102-112-00	CERAMIC	330PF 10% 50V	C1391	1-123-356-00	ELECT	10MF 20% 16V
C452	1-136-169-00	FILM	0.22MF 5% 50V	C1392	1-123-356-00	ELECT	10MF 20% 16V
C453	1-123-333-00	ELECT	100MF 20% 16V	C1393	1-101-004-00	CERAMIC	0.01MF 50V
C454	1-102-963-00	CERAMIC	33PF 5% 50V	TRIMMER			
C466	1-102-115-00	CERAMIC	560PF 10% 50V				
C470	1-123-333-00	ELECT	100MF 20% 16V	CT358	1-141-181-11	CAP, TRIMMER	
C472	1-123-356-00	ELECT	10MF 20% 16V	CT443	1-141-181-11	CAP, TRIMMER	
C473	1-101-361-00	CERAMIC	150PF 5% 50V	DIODE			
C474	1-102-662-00	CERAMIC	7PF 0.5PF 50V				
C475	1-102-662-00	CERAMIC	7PF 0.5PF 50V	D101	8-719-109-97	DIODE RD6.8ES-B2	
C476	1-102-662-00	CERAMIC	7PF 0.5PF 50V	D102	8-719-109-97	DIODE RD6.8ES-B2	
C477	1-102-662-00	CERAMIC	7PF 0.5PF 50V	D103	8-719-911-19	DIODE 1SS119	
C481	1-108-614-91	MYLAR	0.001MF 10% 100V	D104	8-719-109-68	DIODE RD3.6ES-B1	
C482	1-102-820-00	CERAMIC	330PF 5% 50V	D108	8-719-911-19	DIODE 1SS119	
C484	1-136-165-00	FILM	0.1MF 50V				
C1301	1-101-004-00	CERAMIC	0.01MF 50V				

B

Ref.No.	Part No.	Description
D110	8-719-911-19	DIODE 1SS119
D111	8-719-110-08	DIODE RD8.2ES-B2
D112	8-719-911-19	DIODE 1SS119
D113	8-719-911-19	DIODE 1SS119
D114	8-719-911-19	DIODE 1SS119
D115	8-719-109-83	DIODE RD5.1ES-B
D116	8-719-109-90	DIODE RD5.6ES-B3
D117	8-719-911-19	DIODE 1SS119
D118	8-719-911-19	DIODE 1SS119
D120	8-719-911-19	DIODE 1SS119
D121	8-719-911-19	DIODE 1SS119
D123	8-719-911-19	DIODE 1SS119
D124	8-719-911-19	DIODE 1SS119
D125	8-719-911-19	DIODE 1SS119
D126	8-719-109-95	DIODE RD6.8ES-B
D127	8-719-109-95	DIODE RD6.8ES-B
D305	8-719-911-19	DIODE 1SS119
D306	8-719-911-19	DIODE 1SS119
D307	8-719-911-19	DIODE 1SS119
D308	8-719-911-19	DIODE 1SS119
D309	8-719-911-19	DIODE 1SS119
D334	8-719-110-15	DIODE RD10ES-B
D335	8-719-911-19	DIODE 1SS119
D339	8-719-911-19	DIODE 1SS119
D340	8-719-911-19	DIODE 1SS119
D341	8-719-911-19	DIODE 1SS119
D342	8-719-110-15	DIODE RD10ES-B
D343	8-719-110-15	DIODE RD10ES-B
D344	8-719-110-15	DIODE RD10ES-B
D345	8-719-911-19	DIODE 1SS119
D351	8-719-911-19	DIODE 1SS119
D354	8-719-911-19	DIODE 1SS119
D361	8-719-911-19	DIODE 1SS119
D362	8-719-911-19	DIODE 1SS119
D392	8-719-911-19	DIODE 1SS119
D401	8-719-911-19	DIODE 1SS119
D442	8-719-911-19	DIODE 1SS119
D443	8-719-911-19	DIODE 1SS119
D444	8-719-911-19	DIODE 1SS119
D445	8-719-911-19	DIODE 1SS119
D450	8-719-911-19	DIODE 1SS119
D454	8-719-911-19	DIODE 1SS119
D457	8-719-911-19	DIODE 1SS119

DELAY LINE

DL301	1-415-122-31	DELAY LINE, 1H (PAL)
DL401	1-415-380-11	DELAY LINE, Y

IC

IC101	8-759-113-02	IC UPD7508HCU-244
IC102	8-752-321-18	IC CXK1005P
IC103	8-759-102-28	IC UPD6326C
IC104	8-759-182-43	IC UPD8243C

Ref.No.	Part No.	Description	Remark
IC106	8-759-207-07	IC TD62381P	
IC107	8-759-207-07	IC TD62381P	
IC110	8-759-140-66	IC UPD4066BC	
IC121	8-759-171-05	IC UPC7805H	
	*4-363-146-00	HEAT SINK, V.OUT; IC121	
IC122	8-759-700-06	IC NJM7812B	
	*4-323-833-00	HEAT SINK, PIN OUT; IC122	
IC301	8-752-030-86	IC CXA1001AP	
IC302	8-752-030-31	IC CXA1024S	
IC311	8-759-240-73	IC TC4073BP	
IC401	8-751-750-00	IC CX175	
IC411	8-759-135-80	IC UPC358C	
IC412	8-759-140-66	IC UPD4066BC	
<u>COIL</u>			
L101	1-408-424-00	MICRO INDUCTOR 180UH	
L104	1-408-424-00	MICRO INDUCTOR 180UH	
L105	1-408-424-00	MICRO INDUCTOR 180UH	
L161	1-407-364-00	COIL, SPOOK CHOKE 3.3UH	
L333	1-408-416-00	MICRO INDUCTOR 39UH	
L337	1-408-160-00	MICRO INDUCTOR 15MMH	
L405	1-404-496-00	COIL	
L406	1-408-411-00	MICRO INDUCTOR 15UH	
L420	1-408-411-00	MICRO INDUCTOR 15UH	
L421	1-404-496-00	COIL	
L430	1-408-245-00	MICRO INDUCTOR 22MMH	
L431	1-408-414-00	MICRO INDUCTOR 27UH	
L432	1-408-415-00	MICRO INDUCTOR 33UH	
L435	1-408-408-00	MICRO INDUCTOR 8.2UH	
L451	1-404-495-00	COIL	
L452	1-404-495-00	COIL	
L455	1-408-163-00	MICRO INDUCTOR 5.6MMH	
<u>IC LINK</u>			
PS1	1-532-605-00	LINK, IC	
PS2	1-532-637-00	LINK, IC	
<u>TRANSISTOR</u>			
Q101	8-729-117-54	TRANSISTOR 2SA1175	
Q102	8-729-117-54	TRANSISTOR 2SA1175	
Q103	8-729-178-54	TRANSISTOR 2SC2785	
Q104	8-729-178-54	TRANSISTOR 2SC2785	
Q105	8-729-178-54	TRANSISTOR 2SC2785	
Q107	8-729-900-36	TRANSISTOR DTC124ES	
Q108	8-729-178-54	TRANSISTOR 2SC2785	
Q109	8-729-117-54	TRANSISTOR 2SA1175	
Q110	8-729-117-54	TRANSISTOR 2SA1175	
Q111	8-729-103-43	TRANSISTOR 2SB734	
Q112	8-729-178-54	TRANSISTOR 2SC2785	
Q113	8-729-178-54	TRANSISTOR 2SC2785	
Q114	8-729-178-54	TRANSISTOR 2SC2785	
Q115	8-729-900-36	TRANSISTOR DTC124ES	
Q116	8-729-117-54	TRANSISTOR 2SA1175	

B

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R154	1-249-421-11	CARBON	2.2K 5% 1/6W	R313	1-249-421-11	CARBON	2.2K 5% 1/6W
R155	1-247-717-11	CARBON	2.2K 5% 1/4W	R314	1-249-409-11	CARBON	220 5% 1/6W
R156	1-249-423-11	CARBON	3.3K 5% 1/6W	R315	1-249-433-11	CARBON	22K 5% 1/6W
R157	1-249-433-11	CARBON	22K 5% 1/6W	R316	1-249-435-11	CARBON	33K 5% 1/6W
R158	1-249-417-11	CARBON	1K 5% 1/6W	R317	1-249-421-11	CARBON	2.2K 5% 1/6W
R159	1-249-418-11	CARBON	1.2K 5% 1/6W	R318	1-249-409-11	CARBON	220 5% 1/6W
R160	1-249-397-11	CARBON	22 5% 1/6W	R319	1-249-433-11	CARBON	22K 5% 1/6W
R161	1-249-397-11	CARBON	22 5% 1/6W	R320	1-249-435-11	CARBON	33K 5% 1/6W
R162	1-249-397-11	CARBON	22 5% 1/6W	R321	1-249-435-11	CARBON	33K 5% 1/6W
R163	1-249-397-11	CARBON	22 5% 1/6W	R322	1-249-429-11	CARBON	10K 5% 1/6W
R164	1-249-397-11	CARBON	22 5% 1/6W	R323	1-249-441-11	CARBON	100K 5% 1/6W
R165	1-247-692-11	CARBON	22 5% 1/4W	R324	1-249-441-11	CARBON	100K 5% 1/6W
R166	1-249-397-11	CARBON	22 5% 1/6W	R326	1-249-441-11	CARBON	100K 5% 1/6W
R167	1-249-397-11	CARBON	22 5% 1/6W	R327	1-249-423-11	CARBON	3.3K 5% 1/6W
R168	1-249-397-11	CARBON	22 5% 1/6W	R328	1-249-423-11	CARBON	3.3K 5% 1/6W
R169	1-249-397-11	CARBON	22 5% 1/6W	R329	1-249-423-11	CARBON	3.3K 5% 1/6W
R170	1-249-397-11	CARBON	22 5% 1/6W	R330	1-249-417-11	CARBON	1K 5% 1/6W
R171	1-249-397-11	CARBON	22 5% 1/6W	R331	1-215-493-00	CARBON	1M 5% 1/6W
R172	1-249-397-11	CARBON	22 5% 1/6W	R332	1-215-479-00	CARBON	270K 5% 1/6W
R173	1-249-397-11	CARBON	22 5% 1/6W	R333	1-249-414-11	CARBON	560 5% 1/6W
R174	1-249-429-11	CARBON	10K 5% 1/6W	R334	1-247-883-00	CARBON	150K 5% 1/6W
R175	1-249-429-11	CARBON	10K 5% 1/6W	R335	1-249-413-11	CARBON	470 5% 1/6W
R176	1-247-725-11	CARBON	10K 5% 1/4W	R336	1-249-409-11	CARBON	220 5% 1/6W
R177	1-249-433-11	CARBON	22K 5% 1/6W	R337	1-249-427-11	CARBON	6.8K 5% 1/6W
R178	1-249-433-11	CARBON	22K 5% 1/6W	R338	1-249-421-11	CARBON	2.2K 5% 1/6W
R179	1-249-425-11	CARBON	4.7K 5% 1/6W	R339	1-249-417-11	CARBON	1K 5% 1/6W
R181	1-249-435-11	CARBON	33K 5% 1/6W	R340	1-249-421-11	CARBON	2.2K 5% 1/6W
R182	1-247-849-00	CARBON	5.6K 5% 1/6W	R341	1-249-422-11	CARBON	2.7K 5% 1/6W
R183	1-249-433-11	CARBON	22K 5% 1/6W	R342	1-249-428-11	CARBON	8.2K 5% 1/6W
R184	1-249-435-11	CARBON	33K 5% 1/6W	R343	1-249-433-11	CARBON	22K 5% 1/6W
R185	1-247-713-11	CARBON	1K 5% 1/4W	R345	1-249-439-11	CARBON	68K 5% 1/6W
R186	1-249-417-11	CARBON	1K 5% 1/6W	R346	1-247-849-00	CARBON	5.6K 5% 1/6W
R187	1-249-417-11	CARBON	1K 5% 1/6W	R350	1-249-413-11	CARBON	470 5% 1/6W
R188	1-249-417-11	CARBON	1K 5% 1/6W	R351	1-249-405-11	CARBON	100 5% 1/6W
R189	1-249-417-11	CARBON	1K 5% 1/6W	R352	1-249-433-11	CARBON	22K 5% 1/6W
R190	1-249-417-11	CARBON	1K 5% 1/6W	R353	1-249-420-11	CARBON	1.8K 5% 1/6W
R191	1-249-414-11	CARBON	560 5% 1/6W	R354	1-249-435-11	CARBON	33K 5% 1/6W
R192	1-249-417-11	CARBON	1K 5% 1/6W	R355	1-249-433-11	CARBON	22K 5% 1/6W
R193	1-249-423-11	CARBON	3.3K 5% 1/6W	R356	1-249-437-11	CARBON	47K 5% 1/6W
R194	1-249-423-11	CARBON	3.3K 5% 1/6W	R357	1-249-430-11	CARBON	12K 5% 1/6W
R195	1-249-421-11	CARBON	2.2K 5% 1/6W	R358	1-249-435-11	CARBON	33K 5% 1/6W
R196	1-249-414-11	CARBON	560 5% 1/6W	R359	1-247-883-00	CARBON	150K 5% 1/6W
R197	1-249-421-11	CARBON	2.2K 5% 1/6W	R360	1-247-708-11	CARBON	470 5% 1/4W
R198	1-249-405-11	CARBON	100 5% 1/6W	R361	1-249-417-11	CARBON	1K 5% 1/6W
R199	1-249-417-11	CARBON	1K 5% 1/6W	R362	1-249-429-11	CARBON	10K 5% 1/6W
R303	1-249-469-11	CARBON	100K 5% 1/4W	R363	1-249-417-11	CARBON	1K 5% 1/6W
R304	1-249-436-11	CARBON	39K 5% 1/6W	R364	1-249-412-11	CARBON	390 5% 1/6W
R305	1-247-883-00	CARBON	150K 5% 1/6W	R365	1-247-723-11	CARBON	6.8K 5% 1/4W
R306	1-249-435-11	CARBON	33K 5% 1/6W	R366	1-247-891-00	CARBON	330K 5% 1/6W
R308	1-249-409-11	CARBON	220 5% 1/6W	R367	1-249-437-11	CARBON	47K 5% 1/6W
R310	1-247-722-11	CARBON	5.6K 5% 1/4W	R368	1-249-428-11	CARBON	8.2K 5% 1/6W
R311	1-249-439-11	CARBON	68K 5% 1/6W	R370	1-249-419-11	CARBON	1.5K 5% 1/6W
R312	1-249-439-11	CARBON	68K 5% 1/6W	R371	1-249-435-11	CARBON	33K 5% 1/6W

B

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R372	1-249-441-11	CARBON	100K 5% 1/6W	R438	1-249-431-11	CARBON	15K 5% 1/6W
R373	1-249-435-11	CARBON	33K 5% 1/6W	R439	1-249-418-11	CARBON	1.2K 5% 1/6W
R374	1-249-435-11	CARBON	33K 5% 1/6W	R440	1-249-417-11	CARBON	1K 5% 1/6W
R375	1-249-423-11	CARBON	3.3K 5% 1/6W	R441	1-249-420-11	CARBON	1.8K 5% 1/6W
R377	1-249-409-11	CARBON	220 5% 1/6W	R442	1-249-421-11	CARBON	2.2K 5% 1/6W
R378	1-249-414-11	CARBON	560 5% 1/6W	R443	1-249-408-11	CARBON	180 5% 1/6W
R379	1-249-429-11	CARBON	10K 5% 1/6W	R444	1-249-439-11	CARBON	68K 5% 1/6W
R380	1-249-437-11	CARBON	47K 5% 1/6W	R445	1-249-431-11	CARBON	15K 5% 1/6W
R381	1-249-440-11	CARBON	82K 5% 1/6W	R446	1-249-417-11	CARBON	1K 5% 1/6W
R382	1-249-438-11	CARBON	56K 5% 1/6W	R447	1-249-414-11	CARBON	560 5% 1/6W
R383	1-215-479-00	CARBON	270K 5% 1/6W	R448	1-249-393-11	CARBON	10 5% 1/6W
R384	1-249-425-11	CARBON	4.7K 5% 1/6W	R449	1-249-418-11	CARBON	1.2K 5% 1/6W
R385	1-249-414-11	CARBON	560 5% 1/6W	R450	1-249-419-11	CARBON	1.5K 5% 1/6W
R386	1-249-429-11	CARBON	10K 5% 1/6W	R451	1-249-420-11	CARBON	1.8K 5% 1/6W
R387	1-249-417-11	CARBON	1K 5% 1/6W	R452	1-249-393-11	CARBON	10 5% 1/6W
R388	1-215-483-00	CARBON	390K 5% 1/6W	R453	1-249-419-11	CARBON	1.5K 5% 1/6W
R389	1-249-433-11	CARBON	22K 5% 1/6W	R454	1-249-419-11	CARBON	1.5K 5% 1/6W
R390	1-249-433-11	CARBON	22K 5% 1/6W	R456	1-249-409-11	CARBON	220 5% 1/6W
R391	1-249-437-11	CARBON	47K 5% 1/6W	R457	1-249-435-11	CARBON	33K 5% 1/6W
R392	1-249-431-11	CARBON	15K 5% 1/6W	R458	1-249-425-11	CARBON	4.7K 5% 1/6W
R393	1-249-435-11	CARBON	33K 5% 1/6W	R460	1-249-436-11	CARBON	39K 5% 1/6W
R394	1-249-429-11	CARBON	10K 5% 1/6W	R461	1-249-431-11	CARBON	15K 5% 1/6W
R395	1-247-895-00	CARBON	470K 5% 1/6W	R462	1-249-421-11	CARBON	2.2K 5% 1/6W
R396	1-249-419-11	CARBON	1.5K 5% 1/6W	R463	1-249-422-11	CARBON	2.7K 5% 1/6W
R398	1-249-420-11	CARBON	1.8K 5% 1/6W	R464	1-249-409-11	CARBON	220 5% 1/6W
R401	1-249-412-11	CARBON	390 5% 1/6W	R465	1-249-435-11	CARBON	33K 5% 1/6W
R402	1-247-717-11	CARBON	2.2K 5% 1/4W	R466	1-247-721-11	CARBON	4.7K 5% 1/4W
R403	1-249-427-11	CARBON	6.8K 5% 1/6W	R467	1-215-456-00	CARBON	30K 5% 1/6W
R404	1-249-429-11	CARBON	10K 5% 1/6W	R468	1-249-429-11	CARBON	10K 5% 1/6W
R406	1-249-412-11	CARBON	390 5% 1/6W	R470	1-249-420-11	CARBON	1.8K 5% 1/6W
R410	1-249-422-11	CARBON	2.7K 5% 1/6W	R471	1-249-425-11	CARBON	4.7K 5% 1/6W
R411	1-215-489-00	CARBON	680K 5% 1/6W	R472	1-249-420-11	CARBON	1.8K 5% 1/6W
R412	1-249-417-11	CARBON	1K 5% 1/6W	R473	1-249-425-11	CARBON	4.7K 5% 1/6W
R413	1-249-425-11	CARBON	4.7K 5% 1/6W	R474	1-249-417-11	CARBON	1K 5% 1/6W
R414	1-249-438-11	CARBON	56K 5% 1/6W	R475	1-249-405-11	CARBON	100 5% 1/6W
R415	1-249-429-11	CARBON	10K 5% 1/6W	R476	1-249-416-11	CARBON	820 5% 1/6W
R418	1-247-720-11	CARBON	3.9K 5% 1/4W	R477	1-249-413-11	CARBON	470 5% 1/6W
R419	1-249-429-11	CARBON	10K 5% 1/6W	R478	1-249-421-11	CARBON	2.2K 5% 1/6W
R420	1-249-412-11	CARBON	390 5% 1/6W	R479	1-249-421-11	CARBON	2.2K 5% 1/6W
R421	1-249-438-11	CARBON	56K 5% 1/6W	R480	1-249-429-11	CARBON	10K 5% 1/6W
R422	1-249-427-11	CARBON	6.8K 5% 1/6W	R481	1-249-429-11	CARBON	10K 5% 1/6W
R425	1-249-408-11	CARBON	180 5% 1/6W	R482	1-249-421-11	CARBON	2.2K 5% 1/6W
R426	1-249-435-11	CARBON	33K 5% 1/6W	R483	1-249-421-11	CARBON	2.2K 5% 1/6W
R427	1-249-423-11	CARBON	3.3K 5% 1/6W	R484	1-249-433-11	CARBON	22K 5% 1/6W
R429	1-249-429-11	CARBON	10K 5% 1/6W	R485	1-249-417-11	CARBON	1K 5% 1/6W
R430	1-249-423-11	CARBON	3.3K 5% 1/6W	R486	1-249-435-11	CARBON	33K 5% 1/6W
R431	1-249-425-11	CARBON	4.7K 5% 1/6W	R487	1-249-435-11	CARBON	33K 5% 1/6W
R432	1-249-428-11	CARBON	8.2K 5% 1/6W	R488	1-249-435-11	CARBON	33K 5% 1/6W
R433	1-249-428-11	CARBON	8.2K 5% 1/6W	R1100	1-249-405-11	CARBON	100 5% 1/6W
R434	1-249-418-11	CARBON	1.2K 5% 1/6W	R1101	1-249-437-11	CARBON	47K 5% 1/6W
R435	1-249-417-11	CARBON	1K 5% 1/6W	R1102	1-249-429-11	CARBON	10K 5% 1/6W
R436	1-249-421-11	CARBON	2.2K 5% 1/6W	R1105	1-249-431-11	CARBON	15K 5% 1/6W
R437	1-249-431-11	CARBON	15K 5% 1/6W	R1106	1-249-399-11	CARBON	33 5% 1/6W

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

FA

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C619	1-129-743-00	FILM 0.022MF	10% 400V	FUSE			
C620	1-124-126-00	ELECT 47MF	20% 16V	F601	1-532-299-11	FUSE, TIME-LAG 5A/250V	
C621	1-130-062-00	FILM 0.0056MF	5% 630V		*1-533-189-11	HOLDER, FUSE; F601	
C622	1-124-344-91	ELECT 22MF	20% 100V	CONNECTOR			
C623	1-161-973-00	CERAMIC 220PF	10% 400V	FA1	*1-506-348-XX	3P PLUG (L)	
C624	1-161-973-00	CERAMIC 220PF	10% 400V	FA2	*1-506-348-XX	3P PLUG (L)	
C632	1-102-002-00	CERAMIC 680PF	10% 500V	FA3	*1-508-765-00	3P PLUG (M)	
C651	1-162-115-00	CERAMIC 330PF	10% 2KV	FA4	*1-508-767-00	5P PLUG	
C652	1-125-294-00	ELECT(BLOCK) 560MF	20% 160V	FA6	*1-508-765-00	3P PLUG (M)	
C653	1-123-364-00	ELECT 1000MF	20% 50V	FA7	*1-566-058-11	PIN, CONNECTOR 6P	
C654	1-123-338-00	ELECT 2200MF	20% 25V	FA9	*1-564-529-11	CONNECTOR, BOARD TO BOARD 5P	
C655	1-123-338-00	ELECT 2200MF	20% 25V	FA10	*1-564-529-11	CONNECTOR, BOARD TO BOARD 5P	
C656	1-162-318-11	CERAMIC 0.001MF	10% 500V	IC			
C658	1-124-126-00	ELECT 47MF	20% 25V	IC602	8-719-800-82	DIODE TLP581	
C659	1-102-030-00	CERAMIC 330PF	10% 500V	IC651	8-759-145-58	IC UPC4558C	
C661	1-123-333-00	ELECT 100MF	20% 25V	COIL			
C662	1-136-332-11	FILM 0.01MF	5% 630V	L601	1-407-365-00	COIL, CHOKE	
C663	1-124-038-00	ELECT 1MF	20% 50V	L652	1-407-780-00	COIL, SPOOK CHOKE	
C664	1-124-038-00	ELECT 1MF	20% 50V	IC LINK			
C666	1-124-123-00	ELECT 100MF	20% 10V	PS651	1-532-675-00	LINK, IC	
C667	1-102-121-00	CERAMIC 0.0022MF	10% 50V	PS652	1-532-686-00	LINK, IC	
C668	1-136-360-51	FILM 0.22MF	20% 250V	PS654	1-532-637-00	LINK, IC	
C669	1-161-738-12	CERAMIC 0.0047MF	20% 400V	TRANSISTOR			
C670	1-161-738-12	CERAMIC 0.0047MF	20% 400V	Q601	8-729-195-82	TRANSISTOR 2SC2958	
C671	1-161-738-12	CERAMIC 0.0047MF	20% 400V	Q602	8-729-802-07	TRANSISTOR 2SD1403-CA	
C672	1-161-738-12	CERAMIC 0.0047MF	20% 400V		3-701-833-01	HEAD, WASHER, TAPPING SCREW; Q602	
C673	1-161-738-12	CERAMIC 0.0047MF	20% 400V		4-365-216-00	SPACER, MICA; Q602	
C674	1-136-360-51	FILM 0.22MF	20% 250V	Q651	8-729-109-53	TRANSISTOR 2SD795A	
C677	1-136-173-00	FILM 0.47MF	5% 50V		*4-347-706-00	HEAT SINK (TR); Q651	
C682	1-130-062-00	FILM 0.0056MF	5% 630V	Q652	8-729-178-54	TRANSISTOR 2SC2785	
C686	1-136-173-00	FILM 0.47MF	5% 50V	RESISTOR			
DIODE				R601	1-217-328-11	WIREWOUND 2.7 10% 7W F	
D601	8-719-503-06	DIODE S3WB60Z		R604	1-247-289-11	CARBON 8.2M 5% 1W	
D602	8-719-100-65	DIODE RD12E-B2		R609	1-215-894-11	METAL OXIDE 2.2K 5% 2W F	
D605	8-719-924-06	DIODE ERC24-06S		R612	1-215-904-11	METAL OXIDE 100K 5% 2W F	
D607	8-719-815-55	DIODE 1S1555		R613	1-215-895-11	METAL OXIDE 3.3K 5% 2W F	
D608	8-719-815-55	DIODE 1S1555		R614	1-216-458-11	METAL OXIDE 1.8K 5% 2W F	
D609	8-719-925-06	DIODE ERC25-06S		R615	1-205-737-00	CEMENTED 30 10% 7W	
D651	8-719-900-26	DIODE ERD29-08J		R623	1-247-718-11	CARBON 2.7K 5% 1/4W	
D653	8-719-300-59	DIODE CTU-12S		R627	1-249-409-11	CARBON 220 5% 1/6W	
D654	8-719-300-59	DIODE CTU-12S		R628	1-215-479-00	CARBON 270K 5% 1/6W	
	*4-347-706-00	HEAT SINK (TR); D654		R629	1-249-427-11	CARBON 6.8K 5% 1/6W	
D655	8-719-000-12	DIODE MC931		R630	1-247-692-11	CARBON 22 5% 1/4W F	
D656	8-719-300-59	DIODE CTU-12S		R631	1-217-352-11	WIREWOUND 390 10% 7W F	
	*4-347-706-00	HEAT SINK (TR); D656		R632	1-217-192-00	WIREWOUND 0.22 10% 2W F	
D658	8-719-110-03	DIODE RD7.5ES-B2		R652	1-216-430-11	METAL OXIDE 390 5% 1W F	
D659	8-719-110-03	DIODE RD7.5ES-B2					
D660	8-719-815-55	DIODE 1S1555					
D661	8-719-815-55	DIODE 1S1555					
D663	8-719-109-93	DIODE RD6.2ES-B2					
D664	8-719-100-65	DIODE RD12E-B2					

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R653	1-249-425-11	CARBON	4.7K 5% 1/6W			DIODE	
R654	1-216-464-11	METAL OXIDE	18K 5% 2W	F	D603	8-719-815-55	DIODE 1S1555
R662	1-249-436-11	CARBON	39K 5% 1/6W		D604	8-759-157-40	IC UPC574J
R663	1-249-430-11	CARBON	12K 5% 1/6W		D606	8-719-911-19	DIODE 1S119
R664	1-249-441-11	CARBON	100K 5% 1/6W			CONNECTOR	
R665	1-215-436-00	METAL	4.3K 1% 1/6W		FC1	*1-562-516-11	CONNECTOR, BOARD TO BOARD 5P
R666	1-247-713-11	CARBON	1K 5% 1/4W		FC2	*1-562-516-11	CONNECTOR, BOARD TO BOARD 5P
R667	1-247-703-11	CARBON	180 5% 1/4W			IC	
R669	1-247-720-11	CARBON	3.9K 5% 1/4W		IC601	8-759-100-75	IC UPC1394C
R670	1-249-421-11	CARBON	2.2K 5% 1/6W			TRANSISTOR	
R671	1-205-758-11	CEMENTED	100 10% 10W	F	Q603	8-729-178-54	TRANSISTOR 2SC2785
R673	1-244-945-91	CARBON	1M 5% 1/2W			RESISTOR	
R676	1-205-758-11	CEMENTED	100 10% 10W	F	R605	1-247-891-00	CARBON 330K 5% 1/6W
R677	1-216-346-00	METAL OXIDE	0.56 5% 1W	F	R606	1-249-433-11	CARBON 22K 5% 1/6W
R678	1-247-749-11	CARBON	560 5% 1/2W	F	R608	1-249-421-11	CARBON 2.2K 5% 1/6W
R679	1-215-924-00	METAL OXIDE	15K 5% 3W	F	R611	1-215-457-00	METAL 33K 1% 1/6W
R680	1-217-353-11	WIREWOUND	470 10% 7W	F	R616	1-215-452-00	CARBON 20K 5% 1/6W
R681	1-246-403-75	CARBON	1.2 5% 1/4W		R621	1-249-429-11	CARBON 10K 5% 1/6W
R683	1-216-488-11	METAL OXIDE	18K 5% 3W	F	R622	1-249-433-11	CARBON 22K 5% 1/6W
R684	1-246-403-75	CARBON	1.2 5% 1/4W		R624	1-249-425-11	CARBON 4.7K 5% 1/6W
		VARIABLE RESISTOR			R625	1-249-441-11	CARBON 100K 5% 1/6W
RV651	1-230-230-00	RES, ADJ, CERAMIC CARBON 1K			R626	1-247-712-11	CARBON 820 5% 1/4W
RV652	1-226-702-00	RES, ADJ, METAL GLAZE 2.2K			R633	1-247-887-00	CARBON 220K 5% 1/6W
		TRANSFORMER			R634	1-249-437-11	CARBON 47K 5% 1/6W
T601	1-421-758-11	TRANSFORMER, LINE FILTER (LFT)			R636	1-215-471-00	METAL 120K 1% 1/6W
		(AEP,AUS ONLY)			R637	1-249-433-11	CARBON 22K 5% 1/6W
	1-421-974-11	TRANSFORMER, LINE FILTER (WG ONLY)			R638	1-215-435-00	METAL 3.9K 1% 1/6W
T602	1-421-758-11	TRANSFORMER, LINE FILTER (LFT)			R639	1-249-425-11	CARBON 4.7K 5% 1/6W
		(AEP,AUS ONLY)			R674	1-249-440-11	CARBON 82K 5% 1/6W
	1-421-974-11	TRANSFORMER, LINE FILTER (WG ONLY)				THERMISTOR	
T603	1-437-079-11	TRANSFORMER, HORIZONTAL DRIVE			TH601	1-800-944-11	THERMISTOR TH-4700
T605	1-448-931-11	SRT					*****
T607	1-421-975-11	TRANSFORMER, LINE FILTER (WG ONLY)					
		THERMISTOR					
TH651	1-800-944-00	THERMISTOR TH-4700					
THP601	1-806-387-11	THERMISTOR (POSITIVE)					
THP602	1-806-387-11	THERMISTOR (POSITIVE)					

	*1-621-548-11	FC BOARD					

	3-670-570-41	SPACER, SUPPORT					
		CAPACITOR					
C611	1-106-220-00	MYLAR	0.1MF 10% 100V				
C612	1-106-351-00	MYLAR	0.0022MF 5% 50V				
C613	1-123-356-00	ELECT	10MF 20% 16V				
C614	1-123-875-91	ELECT	10MF 20% 50V				
C615	1-102-074-00	CERAMIC	0.001MF 10% 50V				
C616	1-123-875-91	ELECT	10MF 20% 50V				
C625	1-123-380-00	ELECT	1MF 20% 50V				
C627	1-136-153-00	FILM	0.01MF 5% 50V				
C628	1-102-820-00	CERAMIC	330PF 5% 50V				
C634	1-106-220-00	MYLAR	0.1MF 10% 100V				
		CAPACITOR					
C1700	1-124-236-00	ELECT	47MF 20% 16V				
C1701	1-124-247-00	ELECT	10MF 20% 25V				
C1702	1-124-247-00	ELECT	10MF 20% 25V				
C1703	1-124-236-00	ELECT	47MF 20% 16V				
C1704	1-124-247-00	ELECT	10MF 20% 25V				
C1705	1-124-247-00	ELECT	10MF 20% 25V				

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QA

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C1706	1-124-247-00	ELECT 10MF 20%	25V	R1705	1-247-104-00	CARBON 75 5%	1/4W
C1707	1-124-247-00	ELECT 10MF 20%	25V	R1706	1-249-417-11	CARBON 1K 5%	1/6W
C1708	1-124-236-00	ELECT 47MF 20%	16V	R1707	1-215-491-00	CARBON 820K 5%	1/6W
C1709	1-124-247-00	ELECT 10MF 20%	25V	R1708	1-249-417-11	CARBON 1K 5%	1/6W
C1710	1-102-965-00	CERAMIC 39PF 5%	50V	R1709	1-215-491-00	CARBON 820K 5%	1/6W
C1712	1-102-965-00	CERAMIC 39PF 5%	50V	R1710	1-247-104-00	CARBON 75 5%	1/4W
C1714	1-102-965-00	CERAMIC 39PF 5%	50V	R1711	1-249-414-11	CARBON 560 5%	1/6W
C1715	1-124-247-00	ELECT 10MF 20%	25V	R1712	1-247-895-00	CARBON 470K 5%	1/6W
C1716	1-124-247-00	ELECT 10MF 20%	25V	R1713	1-249-414-11	CARBON 560 5%	1/6W
C1717	1-124-247-00	ELECT 10MF 20%	25V	R1714	1-247-895-00	CARBON 470K 5%	1/6W
C1718	1-124-247-00	ELECT 10MF 20%	25V	R1715	1-247-104-00	CARBON 75 5%	1/4W
C1719	1-124-236-00	ELECT 47MF 20%	16V	R1716	1-249-417-11	CARBON 1K 5%	1/6W
C1720	1-124-236-00	ELECT 47MF 20%	16V	R1717	1-215-491-00	CARBON 820K 5%	1/6W
C1721	1-124-236-00	ELECT 47MF 20%	16V	R1718	1-247-708-11	CARBON 470 5%	1/4W
C1722	1-124-236-00	ELECT 47MF 20%	16V	R1719	1-249-408-11	CARBON 180 5%	1/6W
C1723	1-124-247-00	ELECT 10MF 20%	25V	R1720	1-249-421-11	CARBON 2.2K 5%	1/6W
C1728	1-102-973-00	CERAMIC 100PF 5%	50V	R1721	1-247-708-11	CARBON 470 5%	1/4W
C1729	1-102-973-00	CERAMIC 100PF 5%	50V	R1722	1-249-408-11	CARBON 180 5%	1/6W
C1731	1-102-973-00	CERAMIC 100PF 5%	50V	R1723	1-249-421-11	CARBON 2.2K 5%	1/6W
C1732	1-102-973-00	CERAMIC 100PF 5%	50V	R1724	1-247-708-11	CARBON 470 5%	1/4W
C1738	1-102-973-00	CERAMIC 100PF 5%	50V	R1725	1-249-408-11	CARBON 180 5%	1/6W
C1743	1-102-973-00	CERAMIC 100PF 5%	50V	R1726	1-247-895-00	CARBON 470K 5%	1/6W
C1744	1-102-973-00	CERAMIC 100PF 5%	50V	R1727	1-247-713-11	CARBON 1K 5%	1/4W
C1747	1-102-965-00	CERAMIC 39PF 5%	50V	R1728	1-215-491-00	CARBON 820K 5%	1/6W
C1748	1-102-965-00	CERAMIC 39PF 5%	50V	R1729	1-247-710-11	CARBON 560 5%	1/4W
C1749	1-102-965-00	CERAMIC 39PF 5%	50V	R1730	1-247-895-00	CARBON 470K 5%	1/6W
C1750	1-102-965-00	CERAMIC 39PF 5%	50V	R1731	1-247-713-11	CARBON 1K 5%	1/4W
C1752	1-102-973-00	CERAMIC 100PF 5%	50V	R1732	1-215-491-00	CARBON 820K 5%	1/6W
C1753	1-102-965-00	CERAMIC 39PF 5%	50V	R1733	1-247-104-00	CARBON 75 5%	1/4W
<u>DIODE</u>				R1735	1-247-104-00	CARBON 75 5%	1/4W
D1703	8-719-100-38	DIODE RD6.2E-B2		R1736	1-247-104-00	CARBON 75 5%	1/4W
D1706	8-719-100-38	DIODE RD6.2E-B2		R1737	1-247-104-00	CARBON 75 5%	1/4W
D1707	8-719-100-38	DIODE RD6.2E-B2		R1738	1-249-417-11	CARBON 1K 5%	1/6W
D1708	8-719-100-38	DIODE RD6.2E-B2		R1739	1-247-104-00	CARBON 75 5%	1/4W
D1709	8-719-100-38	DIODE RD6.2E-B2		R1740	1-249-429-11	CARBON 10K 5%	1/6W
D1710	8-719-100-38	DIODE RD6.2E-B2		R1742	1-249-412-11	CARBON 390 5%	1/6W
D1711	8-719-100-38	DIODE RD6.2E-B2		R1743	1-247-713-11	CARBON 1K 5%	1/4W
<u>JACK</u>				R1744	1-215-491-00	CARBON 820K 5%	1/6W
J25	1-561-534-41	SOCKET 21P		R1745	1-249-429-11	CARBON 10K 5%	1/6W
<u>COIL</u>				R1746	1-249-406-11	CARBON 120 5%	1/6W
L1770	1-408-604-00	MICRO INDUCTOR 12UH (WG ONLY)		R1750	1-249-417-11	CARBON 1K 5%	1/6W
<u>CONNECTOR</u>				R1751	1-247-104-00	CARBON 75 5%	1/4W
QA1	*1-566-055-11	PIN, CONNECTOR 3P		R1752	1-249-401-11	CARBON 47 5%	1/6W
QA2	*1-560-278-00	PLUG, CONNECTOR 3P		R1753	1-249-401-11	CARBON 47 5%	1/6W
<u>RESISTOR</u>				R1754	1-249-401-11	CARBON 47 5%	1/6W
R1700	1-247-104-00	CARBON 75 5%	1/4W	R1755	1-249-418-11	CARBON 1.2K 5%	1/6W
R1701	1-249-417-11	CARBON 1K 5%	1/6W	R1756	1-249-418-11	CARBON 1.2K 5%	1/6W
R1702	1-215-491-00	CARBON 820K 5%	1/6W	R1760	1-215-483-00	CARBON 390K 5%	1/6W
R1703	1-249-417-11	CARBON 1K 5%	1/6W	R1761	1-215-483-00	CARBON 390K 5%	1/6W
R1704	1-215-491-00	CARBON 820K 5%	1/6W	R1762	1-215-483-00	CARBON 390K 5%	1/6W
				R1763	1-215-483-00	CARBON 390K 5%	1/6W
				R1768	1-249-406-11	CARBON 120 5%	1/6W
				R1769	1-247-710-11	CARBON 560 5%	1/4W

QA QB

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
<u>SWITCH</u>				<u>DIODE</u>			
SW1	1-570-145-11	SWITCH, SLIDE		D1770	8-719-911-19	DIODE 1SS119	
SW2	1-570-145-11	SWITCH, SLIDE		D1771	8-719-911-19	DIODE 1SS119	
SW3	1-570-145-11	SWITCH, SLIDE		D1772	8-719-911-19	DIODE 1SS119	
SW4	1-570-145-11	SWITCH, SLIDE		D1773	8-719-911-19	DIODE 1SS119	
SW5	1-570-145-11	SWITCH, SLIDE		D1774	8-719-911-19	DIODE 1SS119	
*****				D1775	8-719-911-19	DIODE 1SS119	
*A-1270-213-A QB BOARD, COMPLETE				D1776	8-719-911-19	DIODE 1SS119	
*****				D1777	8-719-911-19	DIODE 1SS119	
<u>CAPACITOR</u>				D1780	8-719-911-19	DIODE 1SS119	
C1777	1-102-074-00	CERAMIC	0.001MF	10%	50V	D1781	8-719-911-19
C1778	1-102-074-00	CERAMIC	0.001MF	10%	50V		
C1779	1-124-475-11	ELECT	470MF	20%	16V	D1782	8-719-911-19
C1781	1-101-004-00	CERAMIC	0.01MF		50V	D1783	8-719-931-06
C1788	1-124-247-00	ELECT	10MF	20%	25V	D1784	8-719-110-14
C1789	1-124-247-00	ELECT	10MF	20%	25V	D1787	8-719-109-90
C1790	1-124-236-00	ELECT	47MF	20%	16V	D1788	8-719-911-19
						D1789	8-719-911-19
C1791	1-124-236-00	ELECT	47MF	20%	16V		
C1792	1-102-959-00	CERAMIC	22PF	5%	50V	<u>IC</u>	
C1793	1-101-004-00	CERAMIC	0.01MF		50V	IC1770	8-759-800-65
C1794	1-124-236-00	ELECT	47MF	20%	16V	IC1771	8-759-140-66
C1795	1-101-004-00	CERAMIC	0.01MF		50V	IC1772	8-759-102-37
						IC1773	8-759-102-37
C1799	1-124-471-00	ELECT	1000MF	20%	6.3V	IC1774	8-759-900-86
C1800	1-124-236-00	ELECT	47MF	20%	16V		
C1801	1-124-475-11	ELECT	470MF	20%	16V	IC1775	8-759-901-38
C1802	1-102-971-00	CERAMIC	82PF	5%	50V	IC1776	8-759-900-09
C1803	1-124-471-00	ELECT	1000MF	20%	6.3V		
						<u>COIL</u>	
C1804	1-102-971-00	CERAMIC	82PF	5%	50V	L1770	1-408-239-00
C1806	1-101-361-00	CERAMIC	150PF	5%	50V		
C1807	1-102-111-00	CERAMIC	270PF	10%	50V	<u>TRANSISTOR</u>	
C1808	1-101-004-00	CERAMIC	0.01MF		50V	Q1773	8-729-117-54
C1810	1-124-236-00	ELECT	47MF	20%	16V	Q1774	8-729-178-54
						Q1775	8-729-117-54
C1811	1-124-236-00	ELECT	47MF	20%	16V	Q1776	8-729-178-54
C1813	1-124-236-00	ELECT	47MF	20%	16V	Q1777	8-729-178-54
C1820	1-124-236-00	ELECT	47MF	20%	16V		
C1821	1-101-004-00	CERAMIC	0.01MF		50V	Q1778	8-729-178-54
C1823	1-124-267-11	ELECT	0.1MF	20%	50V	Q1779	8-729-117-54
						Q1780	8-729-117-54
C1824	1-124-267-11	ELECT	0.1MF	20%	50V	Q1781	8-729-178-54
C1825	1-124-267-11	ELECT	0.1MF	20%	50V	Q1784	8-729-900-89
C1827	1-101-880-00	CERAMIC	47PF	5%	50V		
C1828	1-123-611-00	ELECT	1MF	20%	50V	Q1785	8-729-178-54
C1830	1-124-236-00	ELECT	47MF	20%	16V	Q1786	8-729-178-54
						Q1787	8-729-177-43
C1831	1-101-004-00	CERAMIC	0.01MF		50V	Q1788	8-729-117-54
C1832	1-124-236-00	ELECT	47MF	20%	16V	Q1789	8-729-178-54
C1833	1-101-004-00	CERAMIC	0.01MF		50V		
C1834	1-101-004-00	CERAMIC	0.01MF		50V	Q1790	8-729-177-43
C1835	1-124-236-00	ELECT	47MF	20%	16V	Q1791	8-729-900-36
						Q1792	8-729-178-54
C1837	1-124-963-11	ELECT	33MF	20%	16V	Q1793	8-729-117-54
C1838	1-101-880-00	CERAMIC	47PF	5%	50V	Q1794	8-729-178-54
C1839	1-124-236-00	ELECT	47MF	20%	16V		
C1840	1-101-004-00	CERAMIC	0.01MF		50V	Q1795	8-729-178-54
						Q1796	8-729-178-54
						Q1797	8-729-178-54

QB

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
Q1798	8-729-117-54	TRANSISTOR 2SA1175		R1785	1-249-441-11	CARBON 100K 5% 1/6W	
Q1799	8-729-178-54	TRANSISTOR 2SC2785		R1786	1-249-441-11	CARBON 100K 5% 1/6W	
Q1802	8-729-900-36	TRANSISTOR DTC124ES		R1787	1-249-433-11	CARBON 22K 5% 1/6W	
Q1803	8-729-178-54	TRANSISTOR 2SC2785		R1788	1-249-413-11	CARBON 470 5% 1/6W	
Q1804	8-729-178-54	TRANSISTOR 2SC2785		R1794	1-247-895-00	CARBON 470K 5% 1/6W	
Q1805	8-729-178-54	TRANSISTOR 2SC2785		R1795	1-249-422-11	CARBON 2.7K 5% 1/6W	
Q1806	8-729-178-54	TRANSISTOR 2SC2785		R1796	1-249-440-11	CARBON 82K 5% 1/6W	
Q1807	8-729-178-54	TRANSISTOR 2SC2785		R1797	1-249-434-11	CARBON 27K 5% 1/6W	
Q1808	8-729-178-54	TRANSISTOR 2SC2785		R1798	1-249-425-11	CARBON 4.7K 5% 1/6W	
Q1809	8-729-178-54	TRANSISTOR 2SC2785		R1799	1-249-419-11	CARBON 1.5K 5% 1/6W	
Q1810	8-729-178-54	TRANSISTOR 2SC2785		R1800	1-249-425-11	CARBON 4.7K 5% 1/6W	
Q1811	8-729-178-54	TRANSISTOR 2SC2785		R1801	1-249-440-11	CARBON 82K 5% 1/6W	
Q1812	8-729-178-54	TRANSISTOR 2SC2785		R1802	1-249-434-11	CARBON 27K 5% 1/6W	
Q1813	8-729-178-54	TRANSISTOR 2SC2785		R1804	1-249-429-11	CARBON 10K 5% 1/6W	
Q1814	8-729-178-54	TRANSISTOR 2SC2785		R1805	1-249-429-11	CARBON 10K 5% 1/6W	
Q1815	8-729-178-54	TRANSISTOR 2SC2785		R1806	1-249-406-11	CARBON 120 5% 1/6W	
Q1816	8-729-178-54	TRANSISTOR 2SC2785		R1807	1-247-849-00	CARBON 5.6K 5% 1/6W	
Q1817	8-729-178-54	TRANSISTOR 2SC2785		R1808	1-247-849-00	CARBON 5.6K 5% 1/6W	
Q1818	8-729-900-36	TRANSISTOR DTC124ES		R1809	1-249-408-11	CARBON 180 5% 1/6W	
Q1819	8-729-900-36	TRANSISTOR DTC124ES		R1810	1-215-422-00	CARBON 1.1K 5% 1/6W	
Q1820	8-729-900-36	TRANSISTOR DTC124ES		R1811	1-249-413-11	CARBON 470 5% 1/6W	
Q1822	8-729-178-54	TRANSISTOR 2SC2785		R1813	1-249-413-11	CARBON 470 5% 1/6W	
Q1823	8-729-178-54	TRANSISTOR 2SC2785		R1814	1-249-413-11	CARBON 470 5% 1/6W	
Q1825	8-729-178-54	TRANSISTOR 2SC2785		R1815	1-249-412-11	CARBON 390 5% 1/6W	
Q1826	8-729-178-54	TRANSISTOR 2SC2785		R1816	1-249-413-11	CARBON 470 5% 1/6W	
Q1827	8-729-178-54	TRANSISTOR 2SC2785		R1817	1-215-422-00	CARBON 1.1K 5% 1/6W	
Q1828	8-729-178-54	TRANSISTOR 2SC2785		R1819	1-249-413-11	CARBON 470 5% 1/6W	
Q1829	8-729-178-54	TRANSISTOR 2SC2785		R1820	1-249-406-11	CARBON 120 5% 1/6W	
Q1830	8-729-177-43	TRANSISTOR 2SD774		R1821	1-249-406-11	CARBON 120 5% 1/6W	
Q1831	8-729-900-36	TRANSISTOR DTC124ES		R1822	1-249-406-11	CARBON 120 5% 1/6W	
Q1832	8-729-178-54	TRANSISTOR 2SC2785		R1823	1-249-406-11	CARBON 120 5% 1/6W	
Q1891	8-729-900-36	TRANSISTOR DTC124ES		R1824	1-247-881-00	CARBON 120K 5% 1/6W	
<u>CONNECTOR</u>				R1825	1-247-881-00	CARBON 120K 5% 1/6W	
QB11	*1-566-058-11	PIN, CONNECTOR 6P		R1826	1-247-881-00	CARBON 120K 5% 1/6W	
QB12	*1-566-056-11	PIN, CONNECTOR 4P		R1827	1-249-429-11	CARBON 10K 5% 1/6W	
QB13	*1-566-056-11	PIN, CONNECTOR 4P		R1828	1-249-417-11	CARBON 1K 5% 1/6W	
QB14	*1-566-054-11	PIN, CONNECTOR 2P		R1829	1-249-429-11	CARBON 10K 5% 1/6W	
QB15	*1-566-057-11	PIN, CONNECTOR 5P		R1830	1-249-429-11	CARBON 10K 5% 1/6W	
QB16	*1-566-056-11	PIN, CONNECTOR 4P		R1831	1-249-417-11	CARBON 1K 5% 1/6W	
QB17	*1-566-059-11	PIN, CONNECTOR 7P		R1832	1-249-429-11	CARBON 10K 5% 1/6W	
<u>RESISTOR</u>				R1833	1-249-429-11	CARBON 10K 5% 1/6W	
R1771	1-249-469-11	CARBON 100K 5% 1/4W		R1834	1-249-417-11	CARBON 1K 5% 1/6W	
R1776	1-249-405-11	CARBON 100 5% 1/6W		R1835	1-249-428-11	CARBON 8.2K 5% 1/6W	
R1777	1-249-405-11	CARBON 100 5% 1/6W		R1836	1-249-422-11	CARBON 2.7K 5% 1/6W	
R1778	1-249-405-11	CARBON 100 5% 1/6W		R1837	1-249-417-11	CARBON 1K 5% 1/6W	
R1779	1-249-441-11	CARBON 100K 5% 1/6W		R1838	1-247-849-00	CARBON 5.6K 5% 1/6W	
R1780	1-249-433-11	CARBON 22K 5% 1/6W		R1839	1-247-849-00	CARBON 5.6K 5% 1/6W	
R1781	1-249-441-11	CARBON 100K 5% 1/6W		R1841	1-249-433-11	CARBON 22K 5% 1/6W	
R1782	1-249-425-11	CARBON 4.7K 5% 1/6W		R1842	1-249-433-11	CARBON 22K 5% 1/6W	
R1783	1-249-469-11	CARBON 100K 5% 1/4W		R1843	1-249-462-11	CARBON 22K 5% 1/4W	
R1784	1-249-433-11	CARBON 22K 5% 1/6W		R1844	1-249-405-11	CARBON 100 5% 1/6W	
				R1845	1-249-433-11	CARBON 22K 5% 1/6W	
				R1846	1-247-714-11	CARBON 1.2K 5% 1/4W	

QB C

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R1847	1-249-437-11	CARBON	47K 5% 1/6W	R1923	1-249-421-11	CARBON	2.2K 5% 1/6W
R1848	1-249-428-11	CARBON	8.2K 5% 1/6W	R1925	1-249-440-11	CARBON	82K 5% 1/6W
R1849	1-249-437-11	CARBON	47K 5% 1/6W	R1926	1-249-440-11	CARBON	82K 5% 1/6W
R1850	1-249-428-11	CARBON	8.2K 5% 1/6W	R1927	1-249-440-11	CARBON	82K 5% 1/6W
R1851	1-249-465-11	CARBON	47K 5% 1/4W	R1928	1-249-405-11	CARBON	100 5% 1/6W
R1852	1-249-428-11	CARBON	8.2K 5% 1/6W	R1929	1-247-849-00	CARBON	5.6K 5% 1/6W
R1853	1-249-416-11	CARBON	820 5% 1/6W	R1930	1-247-714-11	CARBON	1.2K 5% 1/4W
R1854	1-249-416-11	CARBON	820 5% 1/6W	R1931	1-249-417-11	CARBON	1K 5% 1/6W
R1855	1-249-417-11	CARBON	1K 5% 1/6W	R1932	1-249-417-11	CARBON	1K 5% 1/6W
R1856	1-249-417-11	CARBON	1K 5% 1/6W	R1935	1-249-428-11	CARBON	8.2K 5% 1/6W
R1857	1-247-713-11	CARBON	1K 5% 1/4W	R1936	1-249-430-11	CARBON	12K 5% 1/6W
R1858	1-249-433-11	CARBON	22K 5% 1/6W	R1937	1-249-428-11	CARBON	8.2K 5% 1/6W
R1859	1-249-417-11	CARBON	1K 5% 1/6W	R1938	1-249-428-11	CARBON	8.2K 5% 1/6W
R1860	1-249-429-11	CARBON	10K 5% 1/6W	R1939	1-249-428-11	CARBON	8.2K 5% 1/6W
R1861	1-249-417-11	CARBON	1K 5% 1/6W	R1940	1-249-428-11	CARBON	8.2K 5% 1/6W
R1862	1-249-417-11	CARBON	1K 5% 1/6W	R1941	1-249-428-11	CARBON	8.2K 5% 1/6W
R1863	1-249-433-11	CARBON	22K 5% 1/6W	R1942	1-247-695-11	CARBON	39 5% 1/4W
R1864	1-249-417-11	CARBON	1K 5% 1/6W	R1945	1-249-428-11	CARBON	8.2K 5% 1/6W
R1865	1-249-425-11	CARBON	4.7K 5% 1/6W	R1950	1-249-428-11	CARBON	8.2K 5% 1/6W
R1866	1-249-412-11	CARBON	390 5% 1/6W	R1951	1-249-429-11	CARBON	10K 5% 1/6W
R1867	1-249-417-11	CARBON	1K 5% 1/6W	R1952	1-215-865-11	METAL OXIDE	220 5% 1W F
R1868	1-249-412-11	CARBON	390 5% 1/6W	R1953	1-249-423-11	CARBON	3.3K 5% 1/6W
R1869	1-249-421-11	CARBON	2.2K 5% 1/6W	R1955	1-249-435-11	CARBON	33K 5% 1/6W
R1870	1-249-421-11	CARBON	2.2K 5% 1/6W	R1956	1-249-434-11	CARBON	27K 5% 1/6W
R1871	1-249-421-11	CARBON	2.2K 5% 1/6W	R1965	1-247-712-11	CARBON	820 5% 1/4W
R1872	1-249-433-11	CARBON	22K 5% 1/6W	R1966	1-247-712-11	CARBON	820 5% 1/4W
R1873	1-249-429-11	CARBON	10K 5% 1/6W	R1967	1-247-712-11	CARBON	820 5% 1/4W
R1874	1-249-413-11	CARBON	470 5% 1/6W	R1968	1-247-881-00	CARBON	120K 5% 1/6W
R1875	1-215-432-00	CARBON	3K 5% 1/6W	R1969	1-249-440-11	CARBON	82K 5% 1/6W
R1876	1-249-420-11	CARBON	1.8K 5% 1/6W	R1971	1-249-417-11	CARBON	1K 5% 1/6W
R1877	1-249-429-11	CARBON	10K 5% 1/6W	R1972	1-249-417-11	CARBON	1K 5% 1/6W
R1879	1-249-469-11	CARBON	100K 5% 1/4W	R1973	1-249-417-11	CARBON	1K 5% 1/6W
R1880	1-249-417-11	CARBON	1K 5% 1/6W	R1974	1-247-713-11	CARBON	1K 5% 1/4W
R1881	1-249-422-11	CARBON	2.7K 5% 1/6W	*****			
R1882	1-249-417-11	CARBON	1K 5% 1/6W	*A-1330-801-A C BOARD, COMPLETE			
R1883	1-249-433-11	CARBON	22K 5% 1/6W	*****			
R1884	1-249-417-11	CARBON	1K 5% 1/6W	1-526-798-21 SOCKET, CRT			
R1885	1-249-416-11	CARBON	820 5% 1/6W	*4-379-160-01 COVER (REAR LID), CV			
R1886	1-249-417-11	CARBON	1K 5% 1/6W	*4-379-167-01 COVER (MAIN), CV			
R1887	1-247-715-11	CARBON	1.5K 5% 1/4W	CONNECTOR			
R1888	1-249-417-11	CARBON	1K 5% 1/6W	C1	*1-506-371-00	2P PLUG (L)	
R1892	1-249-415-11	CARBON	680 5% 1/6W	C2	*1-508-765-00	3P PLUG (M)	
R1893	1-249-433-11	CARBON	22K 5% 1/6W	C3	*1-508-765-00	3P PLUG (M)	
R1894	1-249-428-11	CARBON	8.2K 5% 1/6W	C4	*1-566-055-11	PIN, CONNECTOR 3P	
R1896	1-249-415-11	CARBON	680 5% 1/6W	C5	*1-566-061-11	PIN, CONNECTOR 9P	
R1898	1-247-849-00	CARBON	5.6K 5% 1/6W	C8	*1-508-784-00	1P PLUG	
R1899	1-247-849-00	CARBON	5.6K 5% 1/6W	CAPACITOR			
R1901	1-249-429-11	CARBON	10K 5% 1/6W	C701	1-162-116-00	CERAMIC	680PF 10% 2KV
R1902	1-249-417-11	CARBON	1K 5% 1/6W	C702	1-129-714-00	FILM	0.01MF 10% 630V
R1903	1-249-412-11	CARBON	390 5% 1/6W	C703	1-123-356-00	ELECT	10MF 20% 50V
R1921	1-249-424-11	CARBON	3.9K 5% 1/6W	C704	1-123-948-00	ELECT	22MF 20% 250V
R1922	1-249-424-11	CARBON	3.9K 5% 1/6W	C705	1-108-692-81	MYLAR	0.01MF 10% 200V

C

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C706	1-129-751-00	FILM 0.1MF	10% 400V	RESISTOR			
C707	1-102-116-00	CERAMIC 680PF	10% 50V	R701	1-216-397-11	METAL OXIDE 4.7 5% 3W	F
C708	1-102-116-00	CERAMIC 680PF	10% 50V	R702	1-202-848-00	SOL ID 680K 10% 1/2W	
C709	1-102-116-00	CERAMIC 680PF	10% 50V	R703	1-202-838-00	SOL ID 100K 10% 1/2W	
C710	1-102-116-00	CERAMIC 680PF	10% 50V	R704	1-202-846-00	SOL ID 470K 10% 1/2W	
C711	1-123-356-00	ELECT 10MF	20% 25V	R705	1-202-549-00	SOL ID 100 5% 1/2W	
C712	1-102-114-00	CERAMIC 470PF	10% 50V	R706	1-202-838-00	SOL ID 100K 10% 1/2W	
C713	1-102-116-00	CERAMIC 680PF	10% 50V	R707	1-202-842-11	SOL ID 220K 1/2W	
C714	1-162-622-11	CERAMIC 330PF	10% 6.3KV	R708	1-202-818-00	SOL ID 1K 1/2W	
C715	1-102-125-00	CERAMIC 0.0047MF	10% 50V	R709	1-202-818-00	SOL ID 1K 1/2W	
C718	1-102-074-00	CERAMIC 0.001MF	10% 50V	R710	1-202-818-00	SOL ID 1K 1/2W	
C719	1-102-050-00	CERAMIC 0.01MF	500V	R711	1-202-837-00	SOL ID 82K 10% 1/2W	
DIODE				R712	1-202-842-11	SOL ID 220K 1/2W	
D701	8-719-911-19	DIODE 1SS119		R713	1-216-486-00	METAL OXIDE 8.2K 5% 3W	F
D702	8-719-911-19	DIODE 1SS119		R714	1-249-409-11	CARBON 220 5% 1/6W	
D703	8-719-911-19	DIODE 1SS119		R716	1-216-486-00	METAL OXIDE 8.2K 5% 3W	F
D704	8-719-911-19	DIODE 1SS119		R717	1-249-409-11	CARBON 220 5% 1/6W	
D705	8-719-911-19	DIODE 1SS119		R720	1-216-486-00	METAL OXIDE 8.2K 5% 3W	F
D706	8-719-911-19	DIODE 1SS119		R721	1-249-409-11	CARBON 220 5% 1/6W	
D707	8-719-911-19	DIODE 1SS119		R722	1-249-405-11	CARBON 100 5% 1/6W	
D708	8-719-911-19	DIODE 1SS119		R723	1-249-405-11	CARBON 100 5% 1/6W	
D709	8-719-911-19	DIODE 1SS119		R724	1-249-405-11	CARBON 100 5% 1/6W	
D710	8-719-901-83	DIODE 1SS83		R725	1-249-429-11	CARBON 10K 5% 1/6W	
D711	8-719-901-83	DIODE 1SS83		R726	1-249-409-11	CARBON 220 5% 1/6W	
D712	8-719-901-83	DIODE 1SS83		R727	1-249-429-11	CARBON 10K 5% 1/6W	
D713	8-719-901-83	DIODE 1SS83		R728	1-215-404-00	CARBON 200 5% 1/6W	
COIL				R729	1-249-385-11	CARBON 2.2 5% 1/6W	
L701	1-407-711-00	MICRO INDUCTOR 330UH		R730	1-249-408-11	CARBON 180 5% 1/6W	
L702	1-407-705-00	MICRO INDUCTOR 100UH		R731	1-247-704-11	CARBON 220 5% 1/4W	F
L703	1-407-703-00	MICRO INDUCTOR 68UH		R732	1-247-704-11	CARBON 220 5% 1/4W	F
L704	1-408-442-11	MICRO INDUCTOR 10UH		R733	1-247-704-11	CARBON 220 5% 1/4W	F
L705	1-408-404-00	MICRO INDUCTOR 3.9UH		R734	1-247-717-11	CARBON 2.2K 5% 1/4W	
L706	1-407-705-00	MICRO INDUCTOR 100UH		R735	1-247-138-00	CARBON 2K 5% 1/4W	
L707	1-408-434-00	MICRO INDUCTOR 2.2UH		R736	1-247-717-11	CARBON 2.2K 5% 1/4W	
TRANSISTOR				R737	1-249-441-11	CARBON 100K 5% 1/6W	
Q701	8-729-326-11	TRANSISTOR 2SC2611		R739	1-247-887-00	CARBON 220K 5% 1/6W	
Q702	8-729-178-54	TRANSISTOR 2SC2785		R740	1-215-902-11	METAL OXIDE 47K 5% 2W	F
Q703	8-729-200-17	TRANSISTOR 2SA1091		R741	1-249-438-11	CARBON 56K 5% 1/6W	
Q704	8-729-326-11	TRANSISTOR 2SC2611		R742	1-249-429-11	CARBON 10K 5% 1/6W	F
Q705	8-729-178-54	TRANSISTOR 2SC2785		R743	1-249-429-11	CARBON 10K 5% 1/6W	F
Q706	8-729-200-17	TRANSISTOR 2SA1091		R744	1-247-725-11	CARBON 10K 5% 1/4W	F
Q707	8-729-200-17	TRANSISTOR 2SA1091		R745	1-247-713-11	CARBON 1K 5% 1/4W	F
Q708	8-729-326-11	TRANSISTOR 2SC2611		R746	1-215-879-51	METAL OXIDE 47K 5% 1W	F
Q709	8-729-178-54	TRANSISTOR 2SC2785		R747	1-247-725-11	CARBON 10K 5% 1/4W	F
Q710	8-729-255-12	TRANSISTOR 2SC2551		R775	1-247-779-00	CARBON 6.8 5% 1/6W	
Q712	8-729-255-12	TRANSISTOR 2SC2551		R776	1-247-779-00	CARBON 6.8 5% 1/6W	
Q714	8-729-200-17	TRANSISTOR 2SA1091		R777	1-249-441-11	CARBON 100K 5% 1/6W	
Q715	8-729-200-17	TRANSISTOR 2SA1091		R799	1-202-842-11	SOL ID 220K 1/2W	
Q716	8-729-200-17	TRANSISTOR 2SA1091		VARIABLE RESISTOR			
				RV701	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M	
				RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M	



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
RV703	1-228-731-00	RES, ADJ, CERAMIC CARBON 470K		C564	1-102-244-00	CERAMIC 220PF 10% 500V	
RV705	1-228-729-00	RES, ADJ, CERAMIC CARBON 220K		C566	1-106-367-00	MYLAR 0.01MF 10% 100V	
RV706	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K		C568	1-106-212-00	MYLAR 0.047MF 10% 100V	
*****				C570	1-102-212-00	CERAMIC 820PF 10% 500V	
*****				C571	1-123-349-00	ELECT 1000MF 20% 35V	
*A-1345-708-A D BOARD, COMPLETE				C572	1-102-244-00	CERAMIC 220PF 10% 500V	
*****				C573	1-123-935-00	ELECT 33MF 20% 160V	
CAPACITOR				C574	1-106-369-00	MYLAR 0.012MF 10% 200V	
C503	1-108-614-91	MYLAR 0.001MF 10% 100V		C575	1-123-024-00	ELECT 33MF 160V	
C505	1-106-212-00	MYLAR 0.047MF 10% 100V		C576	1-162-114-00	CERAMIC 0.0047MF 2KV	
C506	1-124-902-00	ELECT 0.47MF 20% 50V		C578	1-124-902-00	ELECT 0.47MF 20% 50V	
C507	1-123-369-00	ELECT 4.7MF 20% 25V		C579	1-102-030-00	CERAMIC 330PF 10% 500V	
C508	1-108-627-91	MYLAR 0.012MF 10% 100V		C580	1-108-689-11	MYLAR 0.0056MF 10% 200V	
C509	1-106-220-00	MYLAR 0.1MF 10% 100V		C581	1-136-512-11	FILM 0.0106MF 3% 1.4KV	
C510	1-106-367-00	MYLAR 0.01MF 10% 100V		C582	1-162-135-11	CERAMIC 560PF 10% 2KV	
C511	1-123-330-00	ELECT 22MF 20% 16V		C583	1-106-367-00	MYLAR 0.01MF 10% 100V	
C512	1-124-927-11	ELECT 4.7MF 20% 50V		C586	1-162-115-00	CERAMIC 330PF 10% 2KV	
C513	1-130-868-00	FILM 0.0056MF 5% 50V		C587	1-129-747-00	FILM 0.047MF 10% 400V	
C514	1-123-356-00	ELECT 10MF 20% 16V		C588	1-136-513-11	FILM 0.82MF 5% 200V	
C515	1-123-356-00	ELECT 10MF 20% 16V		C589	1-136-116-00	FILM 1MF 5% 200V	
C516	1-102-820-00	CERAMIC 330PF 5% 50V		C590	1-123-356-00	ELECT 10MF 20% 25V	
C517	1-124-475-11	ELECT 470MF 20% 16V		C593	1-124-555-00	ELECT 1000MF 20% 16V	
C518	1-106-371-00	MYLAR 0.015MF 10% 100V		C598	1-123-332-00	ELECT 47MF 20% 16V	
C519	1-136-173-00	FILM 0.47MF 5% 50V		C1510	1-106-367-00	MYLAR 0.01MF 10% 100V	
C520	1-124-902-00	ELECT 0.47MF 20% 50V		C1515	1-124-477-11	ELECT 47MF 20% 25V	
C521	1-124-902-00	ELECT 0.47MF 20% 50V		C1516	1-124-927-11	ELECT 4.7MF 20% 50V	
C522	1-124-791-11	ELECT 1MF 20% 50V		C1517	1-124-902-00	ELECT 0.47MF 20% 50V	
C523	1-106-367-00	MYLAR 0.01MF 10% 100V		C1518	1-108-630-91	MYLAR 0.022MF 10% 100V	
C524	1-108-622-91	MYLAR 0.0047MF 10% 100V		C1519	1-124-791-11	ELECT 1MF 20% 50V	
C525	1-108-425-00	MYLAR 0.022MF 10% 200V		C1520	1-123-875-91	ELECT 10MF 20% 50V	
C526	1-123-321-00	ELECT 220MF 20% 16V		C1521	1-108-855-00	MYLAR 0.33MF 10% 50V	
C531	1-123-356-00	ELECT 10MF 20% 50V		C1522	1-108-837-00	MYLAR 0.01MF 10% 50V	
C532	1-124-005-11	ELECT 4.7MF 20% 50V		C1524	1-106-172-00	MYLAR 0.001MF 5% 50V	
C535	1-131-501-00	TANTALUM 3.3MF 10% 10V		C1525	1-124-927-11	ELECT 4.7MF 20% 50V	
C536	1-131-375-00	TANTALUM 4.7MF 10% 6.3V		C1526	1-102-971-00	CERAMIC 82PF 5% 50V	
C537	1-123-875-91	ELECT 10MF 20% 50V		C1527	1-123-356-00	ELECT 10MF 20% 50V	
C538	1-124-117-00	ELECT 680MF 10% 25V		C1528	1-123-356-00	ELECT 10MF 20% 50V	
C542	1-123-356-00	ELECT 10MF 20% 16V		C1529	1-124-791-11	ELECT 1MF 20% 50V	
C544	1-130-996-00	FILM 0.047MF 5% 50V		C1531	1-102-231-11	CERAMIC 47PF 10% 500V	
C546	1-124-477-11	ELECT 47MF 20% 25V		C1532	1-124-445-00	ELECT 100MF 20% 16V	
C551	1-108-630-91	MYLAR 0.022MF 10% 100V		C1537	1-108-845-00	MYLAR 0.047MF 10% 50V	
C552	1-102-030-00	CERAMIC 330PF 10% 500V		CONNECTOR			
C553	1-106-192-00	MYLAR 0.0068MF 10% 100V		D1	*1-508-766-00	4P PLUG (M)	
C554	1-123-345-00	ELECT 100MF 20% 35V		D2	*1-566-055-11	PIN, CONNECTOR 3P	
C556	1-123-943-00	ELECT 1MF 20% 250V		D3	*1-566-054-11	PIN, CONNECTOR 2P	
C557	1-123-356-00	ELECT 10MF 20% 25V		D4	*1-508-767-00	5P PLUG	
C558	1-123-356-00	ELECT 10MF 20% 16V		D5	*1-508-765-00	3P PLUG (M)	
C559	1-124-192-00	ELECT 4.7MF 20% 50V		D6	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P	
C560	1-106-208-00	MYLAR 0.033MF 10% 100V		D7	*1-566-056-11	PIN, CONNECTOR 4P	
C561	1-108-614-91	MYLAR 0.001MF 10% 100V		D9	*1-566-055-11	PIN, CONNECTOR 3P	
C562	1-108-616-91	MYLAR 0.0015MF 10% 100V		D10	*1-508-766-00	4P PLUG (M)	
C563	1-123-943-00	ELECT 1MF 20% 250V		D11	*1-508-765-00	3P PLUG (M)	

D

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
D14	*1-566-054-11	PIN, CONNECTOR 2P		L564	1-407-717-00	MICRO INDUCTOR 1MMH	
		<u>DIODE</u>		L1510	1-459-115-00	COIL, DCC-H	
D501	8-719-911-19	DIODE 1SS119				<u>NEON LAMP</u>	
D502	8-719-911-55	DIODE U05G		NL601	1-519-237-11	LAMP, NEON	
D504	8-719-911-19	DIODE 1SS119				<u>TRANSISTOR</u>	
D505	8-719-911-19	DIODE 1SS119		Q505	8-729-178-54	TRANSISTOR 2SC2785	
D507	8-719-100-35	DIODE RD5.6E-B2		Q506	8-729-178-54	TRANSISTOR 2SC2785	
D509	8-719-110-06	DIODE RD8.2ES-B1		Q507	8-729-178-54	TRANSISTOR 2SC2785	
D510	8-719-911-19	DIODE 1SS119		Q508	8-729-117-54	TRANSISTOR 2SA1175	
D551	8-719-911-55	DIODE U05G		Q551	8-729-168-82	TRANSISTOR 2SC2688	
D554	8-719-300-65	DIODE ES1F		Q552	8-729-203-80	TRANSISTOR 2SD1555-LB-S1	
D557	8-719-918-77	DIODE V19G			4-367-513-00	SPACER, MICA; Q552	
D558	8-719-300-76	DIODE RH1A		Q553	8-729-313-42	TRANSISTOR 2SD1134	
D560	8-719-305-15	DIODE GH3F		Q1510	8-729-117-54	TRANSISTOR 2SA1175	
D561	8-719-928-08	DIODE ERD28-08S		Q1511	8-729-178-54	TRANSISTOR 2SC2785	
D562	8-719-300-65	DIODE ES1F		Q1512	8-729-900-36	TRANSISTOR DTC124ES	
D1510	8-719-911-55	DIODE U05G		Q1513	8-729-900-63	TRANSISTOR DTA124ES	
D1511	8-719-911-19	DIODE 1SS119		Q1514	8-729-900-36	TRANSISTOR DTC124ES	
D1512	8-719-911-19	DIODE 1SS119		Q1515	8-729-900-36	TRANSISTOR DTC124ES	
D1513	8-719-911-55	DIODE U05G		Q1516	8-729-105-73	TRANSISTOR 2SK523-L2	
D1514	8-719-911-55	DIODE U05G		Q1517	8-729-900-36	TRANSISTOR DTC124ES	
D1516	8-759-157-40	DIODE UPC574J		Q1518	8-729-900-36	TRANSISTOR DTC124ES	
D1517	8-719-918-77	DIODE V19G		Q1519	8-729-178-54	TRANSISTOR 2SC2785	
D1518	8-719-918-77	DIODE V19G		Q1520	8-729-178-54	TRANSISTOR 2SC2785	
D1521	8-719-911-19	DIODE 1SS119		Q1521	8-729-117-54	TRANSISTOR 2SA1175	
D1522	8-719-000-12	DIODE MC931		Q1522	8-729-177-43	TRANSISTOR 2SD774	
		<u>FUSE</u>		Q1523	8-729-103-43	TRANSISTOR 2SB734	
F501	1-532-285-11	FUSE, TIME-LAG 1.25A/250V				<u>RESISTOR</u>	
	*1-533-189-11	HOLDER, FUSE; F501		R501	1-247-725-11	CARBON 10K 5% 1/4W	
		<u>IC</u>		R503	1-249-422-11	CARBON 2.7K 5% 1/6W	
IC501	8-759-100-60	IC UPC1377C		R504	1-249-411-11	CARBON 330 5% 1/6W	
IC502	8-759-170-12	IC UPC78M12H		R505	1-247-702-11	CARBON 150 5% 1/4W	
IC551	8-759-105-82	IC UPC1378H-P		R506	1-247-700-11	CARBON 100 5% 1/4W	
	3-701-833-01	HEAD, WASHER, TAPPING SCREW; IC551		R507	1-246-536-00	CARBON 430K 5% 1/4W	
IC552	8-759-145-58	IC UPC4558C		R508	1-249-462-11	CARBON 22K 5% 1/4W	
IC1510	8-759-145-58	IC UPC4558C		R509	1-249-433-11	CARBON 22K 5% 1/6W	
IC1511	8-759-145-58	IC UPC4558C		R510	1-247-881-00	CARBON 120K 5% 1/6W	
IC1512	8-759-909-70	IC CX23025		R511	1-247-868-00	CARBON 36K 5% 1/6W	
		<u>COIL</u>		R512	1-249-411-11	CARBON 330 5% 1/6W	
L551	1-459-678-11	HLC		R513	1-249-468-11	CARBON 82K 5% 1/4W	
L552	1-459-390-00	COIL (WITH CORE)		R514	1-247-723-11	CARBON 6.8K 5% 1/4W	
L555	1-408-227-00	MICRO INDUCTOR 470UH		R515	1-249-459-11	CARBON 12K 5% 1/4W	
L556	1-407-699-00	MICRO INDUCTOR 33UH		R516	1-249-435-11	CARBON 33K 5% 1/6W	
L557	1-459-407-00	COIL, FERRITE CHOKE		R517	1-249-407-11	CARBON 150 5% 1/6W	
L558	1-407-365-00	COIL, CHOKE		R518	1-247-701-11	CARBON 120 5% 1/4W	F
L559	1-407-364-00	COIL, SPOOK CHOKE 3.3UH		R519	1-247-849-00	CARBON 5.6K 5% 1/6W	
L560	1-407-695-00	MICRO INDUCTOR 15UH		R520	1-249-419-11	CARBON 1.5K 5% 1/6W	
L562	1-408-239-00	MICRO INDUCTOR 4.7MMH		R521	1-249-417-11	CARBON 1K 5% 1/6W	
L563	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE		R522	1-249-439-11	CARBON 68K 5% 1/6W	

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

D

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HD

HC

K

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R523	1-215-447-00	METAL	12K 1% 1/6W	R583	1-249-433-11	CARBON	22K 5% 1/6W	R1547	1-249-429-11	CARBON	10K 5% 1/6W	*A-1375-066-A HC BOARD, COMPLETE			
R524	1-214-756-00	METAL	13K 1% 1/4W	R584	1-246-511-00	CARBON	39K 5% 1/4W	R1548	1-215-493-00	CARBON	1M 5% 1/6W	*****			
R525	1-249-429-11	CARBON	10K 5% 1/6W	R585	1-247-719-11	CARBON	3.3K 5% 1/4W	R1550	1-247-895-00	CARBON	470K 5% 1/6W	CAPACITOR			
R526	1-215-876-00	METAL OXIDE	15K 5% 1W	R586	1-249-428-11	CARBON	8.2K 5% 1/6W	R1551	1-249-437-11	CARBON	47K 5% 1/6W	C982	1-130-023-00	FILM	0.0027MF 5% 50V
R527	1-249-412-11	CARBON	390 5% 1/6W	R587	1-246-523-00	CARBON	120K 5% 1/4W	R1552	1-247-849-00	CARBON	5.6K 5% 1/6W	C983	1-130-028-00	FILM	0.0068MF 5% 50V
R528	1-249-405-11	CARBON	100 5% 1/6W	R588	1-249-422-11	CARBON	2.7K 5% 1/6W	R1553	1-247-881-00	CARBON	120K 5% 1/6W	C984	1-108-837-00	MYLAR	0.01MF 10% 50V
R529	1-214-743-00	METAL	3.9K 1% 1/4W	R589	1-249-424-11	CARBON	3.9K 5% 1/6W	R1558	1-247-887-00	CARBON	220K 5% 1/6W	C985	1-123-617-00	ELECT	10MF 20% 16V
R530	1-214-753-00	METAL	10K 1% 1/4W	R590	1-249-421-11	CARBON	2.2K 5% 1/6W	R1559	1-249-441-11	CARBON	100K 5% 1/6W	C986	1-123-356-00	ELECT	10MF 20% 25V
R534	1-214-747-00	METAL	5.6K 1% 1/4W	R592	1-215-871-11	METAL OXIDE	2.2K 5% 1W	R1560	1-249-419-11	CARBON	1.5K 5% 1/6W	DIODE			
R535	1-249-424-11	CARBON	3.9K 5% 1/6W	R593	1-249-417-11	CARBON	1K 5% 1/6W	R1561	1-249-435-11	CARBON	33K 5% 1/6W	D971	8-719-109-85	DIODE	RD5.1ES-B2
R536	1-247-849-00	CARBON	5.6K 5% 1/6W	R594	1-249-435-11	CARBON	33K 5% 1/6W	R1562	1-249-440-11	CARBON	82K 5% 1/6W	CONNECTOR			
R537	1-249-429-11	CARBON	10K 5% 1/6W	R595	1-249-421-11	CARBON	2.2K 5% 1/6W	R1563	1-249-409-11	CARBON	220 5% 1/6W	HC1	*1-566-057-11	PIN, CONNECTOR	5P
R538	1-216-350-11	METAL OXIDE	1.2 5% 1W	R596	1-249-420-11	CARBON	1.8K 5% 1/6W	R1565	1-216-349-00	METAL OXIDE	1 5% 1W	HC2	*1-566-056-11	PIN, CONNECTOR	4P
R539	1-249-413-11	CARBON	470 5% 1/6W	R597	1-249-409-11	CARBON	220 5% 1/6W	R1566	1-216-430-11	METAL OXIDE	390 5% 1W	HC3	*1-566-054-11	PIN, CONNECTOR	2P
R540	1-247-872-00	CARBON	51K 5% 1/6W	R598	1-246-525-00	CARBON	150K 5% 1/4W	R1567	1-216-430-11	METAL OXIDE	390 5% 1W	HC4	*1-566-054-11	PIN, CONNECTOR	2P
R541	1-249-429-11	CARBON	10K 5% 1/6W	R599	1-249-431-11	CARBON	15K 5% 1/6W	R1568	1-249-419-11	CARBON	1.5K 5% 1/6W	IC			
R542	1-214-779-00	METAL	120K 1% 1/4W	R1501	1-215-469-00	METAL	100K 1% 1/6W	R1569	1-249-417-11	CARBON	1K 5% 1/6W	IC985	8-759-933-23	IC	BA236
R543	1-215-493-00	CARBON	1M 5% 1/6W	R1502	1-215-451-00	METAL	18K 1% 1/6W	R1570	1-249-382-11	CARBON	1.2 5% 1/6W	RESISTOR			
R544	1-214-781-00	METAL	150K 1% 1/4W	R1503	1-247-722-11	CARBON	5.6K 5% 1/4W	R1571	1-249-382-11	CARBON	1.2 5% 1/6W	R982	1-249-429-11	CARBON	10K 5% 1/6W
R545	1-214-765-00	METAL	33K 1% 1/4W	R1505	1-215-869-11	METAL OXIDE	1K 5% 1W	R1572	1-247-883-00	CARBON	150K 5% 1/6W	R983	1-249-417-11	CARBON	1K 5% 1/6W
R546	1-249-424-11	CARBON	3.9K 5% 1/6W	R1510	1-249-429-11	CARBON	10K 5% 1/6W	R1573	1-247-773-00	CARBON	3.9 5% 1/6W	R984	1-249-429-11	CARBON	10K 5% 1/6W
R547	1-249-429-11	CARBON	10K 5% 1/6W	R1511	1-249-437-11	CARBON	47K 5% 1/6W	R1583	1-249-429-11	CARBON	10K 5% 1/6W	R985	1-249-417-11	CARBON	1K 5% 1/6W
R548	1-249-421-11	CARBON	2.2K 5% 1/6W	R1515	1-249-429-11	CARBON	10K 5% 1/6W	R1584	1-249-413-11	CARBON	470 5% 1/6W	R986	1-249-429-11	CARBON	10K 5% 1/6W
R549	1-247-704-11	CARBON	220 5% 1/4W	R1516	1-249-433-11	CARBON	22K 5% 1/6W	R1585	1-249-417-11	CARBON	1K 5% 1/6W	R988	1-249-405-11	CARBON	100 5% 1/6W
R551	1-214-681-00	METAL	10 1% 1/4W	R1517	1-249-430-11	CARBON	12K 5% 1/6W	R1586	1-247-713-11	CARBON	1K 5% 1/4W	R989	1-249-417-11	CARBON	1K 5% 1/6W
R553	1-247-746-11	CARBON	390 5% 1/2W	R1518	1-249-425-11	CARBON	4.7K 5% 1/6W	R1587	1-249-424-11	CARBON	3.9K 5% 1/6W	R990	1-249-432-11	CARBON	18K 5% 1/6W
R554	1-246-533-00	CARBON	330K 5% 1/4W	R1519	1-249-429-11	CARBON	10K 5% 1/6W	R1588	1-249-416-11	CARBON	820 5% 1/6W	R991	1-249-408-11	CARBON	180 5% 1/6W
R555	1-249-431-11	CARBON	15K 5% 1/6W	R1520	1-247-895-00	CARBON	470K 5% 1/6W	VARIABLE RESISTOR				R992	1-249-427-11	CARBON	6.8K 5% 1/6W
R556	1-246-523-00	CARBON	120K 5% 1/4W	R1521	1-249-429-11	CARBON	10K 5% 1/6W	RV501	1-228-723-00	RES, ADJ, CERAMIC CARBON	4.7K	R993	1-249-418-11	CARBON	1.2K 5% 1/6W
R557	1-249-432-11	CARBON	18K 5% 1/6W	R1522	1-249-409-11	CARBON	220 5% 1/6W	RV503	1-228-717-00	RES, ADJ, CERAMIC CARBON	220	R994	1-249-420-11	CARBON	1.8K 5% 1/6W
R558	1-249-437-11	CARBON	47K 5% 1/6W	R1523	1-249-441-11	CARBON	100K 5% 1/6W	RV509	1-224-249-XX	RES, ADJ, METAL GLAZE	1K	VARIABLE RESISTOR			
R559	1-215-479-00	CARBON	270K 5% 1/6W	R1524	1-249-437-11	CARBON	47K 5% 1/6W	RV552	1-228-725-00	RES, ADJ, CERAMIC CARBON	22K	RV982	1-237-349-11	RES, VAR, CARBON	10K
R560	1-247-895-00	CARBON	470K 5% 1/6W	R1525	1-249-425-11	CARBON	4.7K 5% 1/6W	RV553	1-228-720-00	RES, ADJ, CERAMIC CARBON	1K	RV983	1-237-712-11	RES, VAR, CARBON	10K
R561	1-249-429-11	CARBON	10K 5% 1/6W	R1526	1-249-435-11	CARBON	33K 5% 1/6W	RV554	1-228-727-00	RES, ADJ, CERAMIC CARBON	47K	RV984	1-237-712-11	RES, VAR, CARBON	10K
R562	1-249-425-11	CARBON	4.7K 5% 1/6W	R1527	1-249-421-11	CARBON	2.2K 5% 1/6W	RV555	1-228-722-00	RES, ADJ, CERAMIC CARBON	3.3K	RV985	1-237-350-11	RES, VAR, CARBON	20K
R564	1-247-719-11	CARBON	3.3K 5% 1/4W	R1528	1-249-438-11	CARBON	56K 5% 1/6W	SPARK GAP				RV986	1-230-631-11	RES, ADJ, CARBON	22K
R565	1-216-428-00	METAL OXIDE	180 5% 1W	R1529	1-249-431-11	CARBON	15K 5% 1/6W	S6551	1-519-063-XX	DISCHARGING GAP		RV987	1-237-348-11	RES, VAR, CARBON	5K
R567	1-249-429-11	CARBON	10K 5% 1/6W	R1530	1-249-423-11	CARBON	3.3K 5% 1/6W	TRANSFORMER				*****			
R568	1-247-715-11	CARBON	1.5K 5% 1/4W	R1532	1-249-431-11	CARBON	15K 5% 1/6W	T552	1-437-090-00	HDT		*A-1389-865-A K BOARD, COMPLETE			
R569	1-249-410-11	CARBON	270 5% 1/6W	R1533	1-249-437-11	CARBON	47K 5% 1/6W	T553	1-437-191-11	HCT		*****			
R570	1-249-417-11	CARBON	1K 5% 1/6W	R1534	1-249-437-11	CARBON	47K 5% 1/6W	THERMISTOR				CAPACITOR			
R571	1-247-711-11	CARBON	680 5% 1/4W	R1535	1-249-413-11	CARBON	470 5% 1/6W	TH501	1-806-213-00	THERMISTOR		C201	1-124-902-00	ELECT	0.47MF 20% 50V
R572	1-249-418-11	CARBON	1.2K 5% 1/6W	R1536	1-249-418-11	CARBON	1.2K 5% 1/6W	TH551	1-800-944-00	THERMISTOR TH-4700		C202	1-124-902-00	ELECT	0.47MF 20% 50V
R573	1-216-445-11	METAL OXIDE	12 5% 2W	R1537	1-249-423-11	CARBON	3.3K 5% 1/6W	*****				C203	1-123-332-00	ELECT	47MF 20% 16V
R574	1-249-409-11	CARBON	220 5% 1/6W	R1538	1-215-480-00	CARBON	300K 5% 1/6W	SWITCH							
R575	1-247-725-11	CARBON	10K 5% 1/4W	R1539	1-249-429-11	CARBON	10K 5% 1/6W	S996	1-570-145-11	SWITCH, SLIDE					
R576	1-249-427-11	CARBON	6.8K 5% 1/6W	R1540	1-216-510-11	METAL OXIDE	8.2K 5% 5W	S997	1-570-145-11	SWITCH, SLIDE					
R577	1-249-429-11	CARBON	10K 5% 1/6W	R1541	1-249-429-11	CARBON	10K 5% 1/6W								
R578	1-249-411-11	CARBON	330 5% 1/6W	R1542	1-249-429-11	CARBON	10K 5% 1/6W								
R579	1-247-719-11	CARBON	3.3K 5% 1/4W	R1543	1-215-466-00	CARBON	75K 5% 1/6W								
R580	1-247-725-11	CARBON	10K 5% 1/4W	R1544	1-247-885-00	CARBON	180K 5% 1/6W								
R581	1-216-431-11	METAL OXIDE	560 5% 1W	R1545	1-247-874-00	CARBON	62K 5% 1/6W								
R582	1-216-343-00	METAL OXIDE	0.33 5% 1W	R1546	1-215-479-00	CARBON	270K 5% 1/6W								

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C204	1-123-332-00	ELECT	47MF	20%	16V			D920	9-990-893-01	LED TLY263P		D945	8-719-911-19	DIODE 1SS119	
C205	1-106-222-00	MYLAR	0.12MF	10%	100V			D921	9-990-893-01	LED TLY263P		D946	8-719-911-19	DIODE 1SS119	
C206	1-102-125-00	CERAMIC	0.0047MF	10%	50V			D922	9-990-893-01	LED TLY263P		D947	8-719-911-19	DIODE 1SS119	
C207	1-102-125-00	CERAMIC	0.0047MF	10%	50V			D923	9-990-893-01	LED TLY263P		D948	9-990-901-01	LED TLS263P	
C208	1-106-222-00	MYLAR	0.12MF	10%	100V			D924	9-990-893-01	LED TLY263P		D949	9-990-901-01	LED TLS263P	
C209	1-123-369-00	ELECT	4.7MF	20%	25V			D925	9-990-893-01	LED TLY263P		D950	9-990-893-01	LED TLY263P	
C210	1-123-369-00	ELECT	4.7MF	20%	25V			D926	9-990-893-01	LED TLY263P		D951	9-990-893-01	LED TLY263P	
C211	1-123-369-00	ELECT	4.7MF	20%	25V			D927	9-990-893-01	LED TLY263P		D952	9-990-893-01	LED TLY263P	
C212	1-123-369-00	ELECT	4.7MF	20%	25V			D928	9-990-893-01	LED TLY263P		D953	9-990-893-01	LED TLY263P	
C213	1-123-321-00	ELECT	220MF	20%	16V			D929	9-990-893-01	LED TLY263P		D954	9-990-893-01	LED TLY263P	
C214	1-124-905-11	ELECT	3.3MF	20%	50V			D930	9-990-893-01	LED TLY263P		D955	9-990-893-01	LED TLY263P	
C215	1-124-905-11	ELECT	3.3MF	20%	50V			D931	9-990-893-01	LED TLY263P		D956	9-990-893-01	LED TLY263P	
C218	1-123-324-00	ELECT	1000MF	20%	16V							D957	9-990-893-01	LED TLY263P	
C219	1-124-445-00	ELECT	100MF	20%	16V							D958	9-990-893-01	LED TLY263P	
C221	1-124-925-11	ELECT	2.2MF	20%	50V							D959	9-990-893-01	LED TLY263P	
C222	1-123-332-00	ELECT	47MF	20%	16V							D960	9-990-893-01	LED TLY263P	
C224	1-124-925-11	ELECT	2.2MF	20%	50V							D961	9-990-893-01	LED TLY263P	
C226	1-123-356-00	ELECT	10MF	20%	25V							D962	9-990-893-01	LED TLY263P	
C227	1-123-349-00	ELECT	1000MF	20%	35V							D963	9-990-893-01	LED TLY263P	
C228	1-108-633-81	MYLAR	0.039MF	10%	100V							D964	9-990-893-01	LED TLY263P	
C229	1-124-908-11	ELECT	22MF	20%	25V							D965	9-990-893-01	LED TLY263P	
C230	1-106-222-00	MYLAR	0.12MF	10%	100V							D968	9-990-901-01	LED TLS263P	
C231	1-123-336-00	ELECT	470MF	20%	25V										
C232	1-108-633-81	MYLAR	0.039MF	10%	100V										
C233	1-124-908-11	ELECT	22MF	20%	25V										
C234	1-106-222-00	MYLAR	0.12MF	10%	100V							R940	1-247-703-11	CARBON	180 5% 1/4W
C235	1-123-336-00	ELECT	470MF	20%	25V							R941	1-247-700-11	CARBON	100 5% 1/4W
C244	1-123-332-00	ELECT	47MF	20%	16V							R942	1-247-704-11	CARBON	220 5% 1/4W
C245	1-124-477-11	ELECT	47MF	20%	25V							R943	1-247-700-11	CARBON	100 5% 1/4W
C283	1-123-332-00	ELECT	47MF	20%	16V							R944	1-247-704-11	CARBON	220 5% 1/4W
<u>DIODE</u>															
D201	8-719-101-61	DIODE	RD6.2E-L2												
D202	8-719-101-86	DIODE	RD13E-L2												
D203	8-719-911-19	DIODE	1SS119												
D204	8-719-911-19	DIODE	1SS119												
D206	8-719-911-19	DIODE	1SS119												
D207	8-719-911-19	DIODE	1SS119												
D210	8-719-911-19	DIODE	1SS119												
D211	8-719-911-19	DIODE	1SS119												
D1519	8-719-110-37	DIODE	RD13ES-B3												
<u>IC</u>															
IC201	8-759-276-30	IC	TA7630P												
IC204	8-759-205-84	IC	TA7273P												
<u>CONNECTOR</u>															
K1	*1-566-054-11	PIN, CONNECTOR	2P												
K2	*1-566-056-11	PIN, CONNECTOR	4P												
K3	*1-566-057-11	PIN, CONNECTOR	5P												
K4	*1-508-765-00	3P PLUG (M)													
K5	*1-560-123-00	PLUG, CONNECTOR (2.5MM)	3P												
				<u>TRANSISTOR</u>											
				Q201	8-729-178-54	TRANSISTOR	2SC2785								
				Q207	8-729-177-43	TRANSISTOR	2SD774								
				<u>RESISTOR</u>											
				R201	1-249-441-11	CARBON	100K 5% 1/6W								
				R202	1-249-441-11	CARBON	100K 5% 1/6W								
				R203	1-249-419-11	CARBON	1.5K 5% 1/6W								
				R204	1-249-429-11	CARBON	10K 5% 1/6W								
				R205	1-249-429-11	CARBON	10K 5% 1/6W								
				R206	1-249-429-11	CARBON	10K 5% 1/6W								
				R207	1-249-419-11	CARBON	1.5K 5% 1/6W								
				R208	1-249-419-11	CARBON	1.5K 5% 1/6W								
				R209	1-249-432-11	CARBON	18K 5% 1/6W								
				R210	1-249-432-11	CARBON	18K 5% 1/6W								
				R212	1-249-425-11	CARBON	4.7K 5% 1/6W								
				R213	1-249-405-11	CARBON	100 5% 1/6W								
				R221	1-215-865-11	METAL OXIDE	220 5% 1W F								
				R223	1-247-881-00	CARBON	120K 5% 1/6W								
				R224	1-249-412-11	CARBON	390 5% 1/6W								
				R226	1-247-881-00	CARBON	120K 5% 1/6W								
				R227	1-249-412-11	CARBON	390 5% 1/6W								
				R228	1-249-429-11	CARBON	10K 5% 1/6W								
				R229	1-249-385-11	CARBON	2.2 5% 1/6W F								
				R230	1-249-429-11	CARBON	10K 5% 1/6W								
				R231	1-249-385-11	CARBON	2.2 5% 1/6W F								
				R236	1-249-423-11	CARBON	3.3K 5% 1/6W								
				R243	1-249-417-11	CARBON	1K 5% 1/6W								
				R244	1-249-417-11	CARBON	1K 5% 1/6W								
				R245	1-249-417-11	CARBON	1K 5% 1/6W								
				R246	1-249-417-11	CARBON	1K 5% 1/6W								

N

Ref.No.	Part No.	Description	Remark
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	*9-990-898-01	N BOARD (KEY BOARD UNIT B) *****	
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IC

IC935	8-741-138-70	IC BX1387 (DETECTOR)	
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MISCELLANEOUS

	△ 1-237-614-11	RESISTOR ASSY, HIGH-VOLTAGE	
	△ 1-426-315-11	COIL, DEMAGNETIZATION	
T604	△ 1-439-372-32	TRANSFORMER ASSY, FLYBACK	
	△ 1-451-295-11	DEFLECTION YOKE (SY-153E)	
	1-452-032-00	MAGNET, DISK; 10MM ∅	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ∅	
	1-452-277-00	MAGNET, BMC	
	1-464-803-11	KEY BOARD UNIT (A)	
	1-464-804-11	KEY BOARD UNIT (B)	
	△ 1-534-820-13	POWER CORD (AEP, AUS ONLY)	
	△ 1-559-409-11	CORD, POWER (WG ONLY)	

S901	△ 1-554-965-12	SWITCH, PUSH (AC POWER)(1 KEY)	
V901	△ 8-736-955-05	PICTURE TUBE (A51JKQ10X)	

ACCESSORIES AND PACKING MATERIALS

Part No.	Description	Remark
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A-1470-789-A	COMMANDER ASSY (RM-668)	
*4-377-015-01	BAG, PROTECTION	
*4-382-067-01	CUSHION (UPPER) (ASSY)	
*4-382-068-01	CUSHION (LOWER) (ASSY)	
*4-383-143-01	INDIVIDUAL CARTON	
4-482-400-11	MANUAL, INSTRUCTION	

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

SONY

Video/RGB Monitor Service Bulletin

Sony Service Company - Technical Services
A Division of Sony Corporation of America
Sony Drive, Park Ridge, New Jersey 07656

Model: PVM-2030/PVM-2530

No. 7

Subject: Last Condition Memory Mis-Operation

Date: March 12, 1993

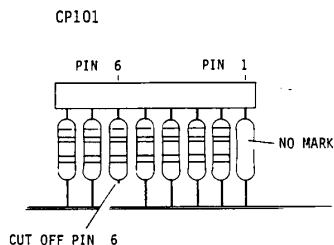
Symptom:
(B22)

Unit fails to return to the last memory settings.

If the unit is RESET (to return to default settings) using the front Panel Controls then, powered OFF and ON again, the unit may not power up with the default settings.

Solution:

If this is the case, remove or cut off the pull-up resistor (10K Ohm) part of CP-101 which is connected to pin 15 (Busy Terminal) of IC-102 (CXK-1005P) on the B1-Board. This resistor is the 6th one on CP-101 (See Diagram).



CSI-112 PVM Monitors

SONY

Video/RGB Monitor
Service Bulletin

Sony Service Company - Technical Services
A Division of Sony Corporation of America
Sony Drive, Park Ridge, New Jersey 07656

Model: PVM-2030

No. 5

Subject: Complete GA & GB Board Part Number

Date: March 12, 1993

Symptom:
(**)

What is the part number for the Complete GA and GB Boards

Solution:

The GA and GB complete boards are now available as a G Board under the part number listed below:

DESCRIPTION	PART NUMBER
G BOARD COMPLETE (GA+GB COMPLETE+SHIELD CASE)	A-1477-425-A

CSI-112 PVM Monitors

Reference: DP92-0033



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CSI-112293-5

SONY

Video/RGB Monitor Service Bulletin

Sony Service Company - Technical Services
A Division of Sony Corporation of America
Sony Drive, Park Ridge, New Jersey 07656

Model: SEE BELOW

No. 3

Subject: Cables and Adapters Chart For Monitors

Date: March 12, 1993

**GDM2038/GDM2036/GDM1936/CPD1704S/CPD1730/CPD1604S/CPD1430/
CPD1304S/CPD1304/CPD1302/CPD1320S/CPD1320/PVM3230/PVM2530/
PVM2030/GVM2000/GVM2020/GVM1300/GVM1311Q**

Symptom:
(**)

What cable and/or adapter is needed for operating this monitor with my computer?

Solution:

Please refer to the Attached Chart on this document, to locate the cable and/or adapter required to connect a Sony Monitor to the corresponding Video type.

Note1:

Symbol	Meaning
-	Not Compatible or Recommended
*	Use the Supplied or Attached Cable
@	At
ADAPTER Number	Use the Supplied or Attached Cable with the Adapter specified. Example: "Connecting the GDM1936 to the MAC Quadra (640X480, 66 Hz) requires the Supplied cable and the TMACSTD adapter."

Note 2: Any Non-Standard or Non listed IBM Video Modes will use the same cable as the VGA standard. However, compatibility with the non-standard or Non listed Video modes should be established. In Most Cases, compatibility is established by verifying that the Horizontal and Vertical operating frequencies of the Non-Standard or Non listed Video Modes fall in the operating range of the Monitor in question.

Note 3: Any Non-Standard or Non listed MAC Video Types will probably use the adapters as follows:

MAC Video Type or Resolution	Adapter Needed
640 X 400 @ 66 Hz	TMACSTD
640 X 480 @ 60 Hz	TMACLC6VGA
640 X 480 @ 66 Hz	TMACSTD
800 X 600 @ 56 Hz	TMACLC6VGA
832 X 624 @ 75 Hz	TQUA16
1152 X 870 @ 75 Hz	TMAC115VGA

Note 4: TMAC and TQUA adapters are not available through KCP. Customer should get these adapters through their dealer.

(Continued)

Reference: Tech Flash 34R2



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CSI-112293-3

CS1-112
Monitors

Computer	Video Type	Monitors					
		CDM-2038 CDM-2036 CDM-1926 (1-590-226-11) Cable Supplied	CPD-1730 CPD-1704S CPD-1604S CPD-1430 CPD-1404S CPD-1304S Cable Attached	CPD-1304 (SMF-523) Cable Supplied	CPD-1302 Cable Attached	PVM-2830 PVM-2530	PVM-3230 CTD-512 Cable SMF-523 Cable
IBM	CGA	-	-	-	CTD-512 Cable	-	CTD-512 Cable
	EGA	-	-	-	CTD-512 Cable	-	CTD-512 Cable
	VGA	-	-	-	SMF-523 Cable	-	SMF-523 Cable
See Note 2							
IBM Other							
MAC	640 X 480 @ 60Hz	TMACSTD	TMACSTD	SMF-523 Cable & TMACSTD	-	-	SMF-523 Cable & TMACSTD
Quadra 700	640 X 480 @ 60Hz	TMACLOVGA	TMACLOVGA	SMF-523 Cable & TMACLOVGA	TMACLOVGA	-	SMF-523 Cable & TMACLOVGA
800, 900, 950	800 X 600 @ 50Hz	TMACLOVGA	TMACLOVGA	SMF-523 Cable & TMACLOVGA	-	-	SMF-523 Cable & TMACLOVGA
Centris 610, 650	832 X 624 @ 75Hz	TQUA16	TQUA16	-	-	-	-
1152 X 870 @ 75Hz	1152 X 870 @ 75Hz	TMACLOVGA	TMACLOVGA	-	-	-	-
MAC IIx, IIfx	640 X 480 @ 60Hz	TMACSTD	TMACSTD	SMF-523 Cable & TMACSTD	-	-	SMF-523 Cable & TMACSTD
MAC LC, LC II, IIfx, IIfx Performa 400, 600	640 X 480 @ 60Hz	TMACLOVGA	TMACLOVGA	SMF-523 Cable & TMACLOVGA	TMACLOVGA	-	SMF-523 Cable & TMACLOVGA
MAC LC III	640 X 480 @ 60Hz	TMACSTD	TMACSTD	SMF-523 Cable & TMACSTD	-	-	SMF-523 Cable & TMACSTD
MAC LC III	640 X 480 @ 60Hz	TMACLOVGA	TMACLOVGA	SMF-523 Cable & TMACLOVGA	TMACLOVGA	-	SMF-523 Cable & TMACLOVGA
PowerBook 160, 165c, Duo Dock, Duo Mini Dock	832 X 624 @ 75Hz	TQUA16	TQUA16	-	-	-	-
See Note 3							
MAC Other							